



Ministry of Industry  
& Mineral Resources

# AL HALAHILAH LICENSING ROUND

## INFORMATION MEMORANDUM

Publishing Date 1<sup>st</sup> April 2024

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## Foreword

Economic diversification is the foundation of Saudi Arabia's Vision 2030, and the mining and industrial sectors are critical to the Kingdom of Saudi Arabia's (the "**Kingdom**" or "**KSA**") strategy, through increasing local production, exports, job opportunities and investments, in line with the Vision 2030 targets.

In August 2019, the Ministry of Industry and Mineral Resources was established as an independent government body with responsibility for regulating the mining sector in the Kingdom. This is a clear representation of the government's priority to develop this sector of the Saudi economy and provide opportunities to local and foreign investors while maximizing their benefits.

The mining sector is set to become the third pillar of the Kingdom's economy (after oil & gas and chemicals). To enable this sector growth, the Kingdom's mining strategy includes a comprehensive set of initiatives to develop and enhance the mining ecosystem in the Kingdom, including areas such as accelerating exploration by promoting investor protection, clarifying the legal and fiscal regimes and in promoting geodata acquisition and distribution through the Regional Geological Survey Program and the creation of the National Geoscience Database.

The new mining law that came into effect in 2021 targets the exploitation of the Kingdom's mineral resources and the development of its mineral-based manufacturing industry, all of which is expected to reduce imports to the Kingdom by c. \$10 billion and generate more than 200,000 jobs by 2030.

The Kingdom's competitive Licensing Rounds are a continuation of a successful, new chapter in our journey towards unlocking our country's vast mineral resources by fast-tracking exploration activity. Al Halahilah project is an example of an enticing exploration project with the potential to contribute to the Kingdom's future copper economy.

This Licensing Round will enable the Kingdom to identify the most suitable exploration partners for long-term growth and investment in the mining sector of the Kingdom, and provides interested investors with open access to data relating to Al Halahilah project.

We look forward to showcasing Al Halahilah on a global stage so that, together, we can create value for our partners and the Kingdom.

## EXECUTIVE SUMMARY

As announced on 10<sup>th</sup> January 2024, the Ministry is conducting a competitive licensing round for the exploration of Al Halahilah site ("**Licensing Round**" or the "**Project**") pursuant to which the Ministry will award the successful bidder ("**Successful Bidder**") an exploration license for Al Halahilah site ("**Exploration License**"). The Licensing Round is designed as a transparent, standards-based, competitive process, which will result in the selection of the most appropriate licensee for Al Halahilah site ("**Al Halahilah**" or the "**Site**").

**Bidders are hereby invited to submit their best offer for the Exploration License as part of a valid and binding proposal to become a licensee for the Site ("Proposal"). Proposals must be submitted to the Ministry on or before 1<sup>st</sup> May 2024 ("Proposal Submission Deadline") by completing the application form set out in the Ministry's data room ("Application Form") which can be accessed via the data room created on the Ministry's website <https://mim.gov.sa/en/initiatives/31907/> ("Data Room").**

### The Site

Al Halahilah covers an area of ~35 km<sup>2</sup> in the far southwest of the Kingdom. The Project is readily accessible by sealed roads from Najran, ~35 km to the east-southeast, and by tracks within the area. Al Halahilah is strategically located on the Arabian Shield within the Asir Terrane—a region renowned for its high prospectivity in various mineralization styles, notably volcanogenic massive sulfide (VMS).

Further details are set out in Section 2 of this Information Memorandum.

### Minimum Qualification Criteria

Bidders must demonstrate that they meet the Minimum Qualification Criteria in order for the Ministry to continue evaluating their respective Proposals, as summarised in the below table and further described in Section 4 of this Information Memorandum.

Whilst the Minimum Qualification Criteria is scored on a 'Pass/ Fail' basis and does not have a weighting score attributed to it, bidders must demonstrate that they satisfy all the Minimum Qualification Criteria in order for their respective Proposals to be evaluated further in this Licensing Round.

Section	Criteria	Description
Technical Ability	<i>Internal Capability</i>	Bidders must demonstrate internal capabilities in mineral exploration.
	<i>Track Record / Examples</i>	Bidders must demonstrate track record experience in VMS or similar style mineralisation including capability in projects through the development cycle and developing exploration projects beyond the discovery stage through pre-feasibility and feasibility studies.

Financial Details	<i>Exploration Expenditure</i>	Bidders must have undertaken a minimum expenditure of USD five hundred thousand (\$500,000) in exploration activities in the last twelve (12) months.
	<i>Exploration Funding</i>	Bidders must demonstrate access to at least USD five hundred thousand (\$500,000) to fund the first three months of any exploration work program to be undertaken in the Kingdom in connection with the Project.

## Scoring Methodology

Proposals submitted by bidders who satisfy all the Minimum Qualification Criteria will be further evaluated by the Ministry and scored in accordance with the following scoring methodology, and as further detailed in Section 5.8 of this Information Memorandum.

The bidder whose Proposal receives the highest score will be announced as the Successful Bidder for the Site and will be awarded the Exploration License by the Ministry once the legal and regulatory requirements are satisfied.

Section	Criteria	Weighting
Proposed Work Program and Exploration Spend	Proposals will be evaluated on the thoroughness and soundness of the bidder's proposed Work Program for the entire licensed area.	50%
Resource Exploration and Discovery Activities	Proposals will be evaluated on the bidder's experience in relation to focused exploration activities.	20%
Innovation	Proposals will be evaluated based on the innovative solutions and technologies used by the bidder in mineral exploration activities.	10%
Social Impact Management Plan	Proposals will be evaluated on the demonstrated ability to successfully implement social development in and around the Site, and local community expenditure.	20%
Financial Capability	Proposals will be evaluated on the bidder's financial resources, and its capability to fund its Work Program.	Pass/ Fail
Environmental Impact Management Plan	Proposals will be evaluated on the basis of whether the bidder has the demonstrated ability to ensure the protection of the environment.	Pass/ Fail
Corporate and Legal Requirements	Proposals will be evaluated on the basis of the bidder's corporate and legal information.	Pass/ Fail
Performance Financial Guarantee	Proposal will be evaluated on the bidder's commitment to provide a Performance Financial Guarantee if selected as a Successful Bidder.	Pass/ Fail
Model Exploration License	Proposals will be evaluated on the bidder's commitment to accept the terms of the Model Exploration License.	Pass/ Fail

## **PART A: GENERAL INFORMATION**



# 1. Introduction

The Ministry has launched the Licensing Round with the objective of identifying a Successful Bidder to whom it will award the Exploration License in accordance with the Mining Investment Law (issued by Royal Decree No. M/140 dated 10/19/1441H) ("**Mining Investment Law**") and its Implementing Regulations issued by Ministerial Resolution (3293/1/1444) dated 05/06/1444H ("**Implementing Regulations**"). The Licensing Round is designed as a transparent, standards-based, competitive process, which will result in the selection of the most appropriate licensee for the Site.

**Bidders are hereby invited to submit their best offer for the Exploration License as part of a valid and binding Proposal to become a licensee for the Site. Proposals must be submitted to the Ministry on or before the Proposal Submission Deadline.**

The Licensing Round requires that the Successful Bidder possesses, demonstrates and dedicates to the Project qualified management personnel and resources, adherence to principles of sustainability and conformity with the laws of the Kingdom. The Successful Bidder will have demonstrated that it is committed to working with the Government to explore the Project in a timely manner to define future options for local and regional economic growth.

To that end, the Ministry suggests that the following points be considered seriously by the bidders in preparing their Proposals:

- 1) A clear commitment to conduct an accelerated exploration programme for the Site along a suitable timeline, coupled with the technical and financial capability to do so; and
- 2) To the extent possible during the exploration period, the provision of employment for the local population with a particular focus on the education and training of those hired locally.

Responses should be unambiguous and include detailed information.

This Information Memorandum is intended to be used by bidders to provide further information on the Site and the Licensing Round. It also sets out the rules for submission of a valid Proposal and participation in subsequent stages of the Licensing Round, as set out in Part B of this Information Memorandum ("**Proposal Submission Rules**").

## 1.1 Al Halahilah Precious and Base Metal Project

The Project covers an area of ~35 km<sup>2</sup> in the far southwest of the Kingdom. The Project is readily accessible by sealed roads from Najran, ~35 km to the east-southeast, and by tracks within the area. Al Halahilah is strategically located on the Arabian Shield within the Asir Terrane—a region renowned for its high prospectivity in various mineralization styles, notably volcanogenic massive sulfide (VMS).

Of particular significance, the Asir Terrane is recognized for hosting several well-established VMS mineral belts, including the Kutam–Al Masane VMS belt, in which the Project is hosted. This geological feature is home to the nearby Al Masane copper-zinc (Cu-Zn) mine (~50 km to the north) and the Kutam Cu-Zn deposit, which exhibit mineralization styles analogous to those identified at Al Halahilah.

Exploration activity has defined three distinct prospects—Al Halahilah, Al Halahilah South, and Al Halahilah Gold—which extend over a strike length of ~9 km. The Project area comprises mainly altered and iron (Fe)-stained volcanic and sedimentary rocks that are intruded by an interpreted rhyolite dome. The mineralization style is suggested to be bimodal volcanic-related Cu-Zn volcanic-hosted massive sulfide (VHMS). No modern exploration has been undertaken since the 1980s.

Magnetic and induced polarization/self-potential (IP/SP) geophysical surveys, wadi-sediment sampling, rock-chip sampling, and drilling have all been conducted within the Project area. Of note, results from diamond drill cores have been used to estimate a resource of 1.04 Mt grading 0.44% Cu, 2.99% Zn, 0.45 g/t gold (Au), and 25.2 g/t silver (Ag) in Al Halahilah prospect.

The Project holds significant promise as a Au and base-metal prospect. Numerous mineralized zones of volcanogenic massive sulfide (VMS)-style mineralization extend along a prospective strike length of ~9 km. The Project area is easily accessible, and further exploration targeting defined, walk-up targets could rapidly define a potential mineral resource.

### *Prospectivity*

The Project is a highly prospective precious- and base-metal exploration project. The Project is strategically located within a region that boasts numerous zones of VMS-style mineralization. The Project area is easily accessible, and with minimal further exploration, there is a likelihood of identifying walk-up drill targets. Early exploration success could pave the way for the swift determination of an initial mineral resource. Situated within the Asir Terrane, the Project area is in the Kutam-Al Masane VMS Belt, which is one of several underexplored VMS belts characterized by numerous VMS occurrences. The mapped rock units (Halaban Group metavolcanic and metasedimentary rocks) within the Project area are lithological identical to those hosting Al Masane VMS deposit.

Fieldwork completed to date has highlighted the exploration potential of Al Halahilah for VHMS and associated distal precious-metal mineralization. Activities have focused on targeting exposed areas of mineralization, including rock-chip geochemical analysis during drilling and surface outcrop investigations. Limited electrical geophysical surveying has been undertaken; however, this was carried out after drilling, and the anomalies defined were coincident with known mineralization. The full 11 km of the altered and Fe-stained volcanic and sedimentary rocks has not yet been fully assessed using surface methods, including geophysical surveying and geochemical analysis.

Drilling is typically spaced at 100 m at Al Halahilah and 200 m at Al Halahilah South, with an average drillhole depth of ~120 m; however, there is good up-dip potential due to the topography. With mineralization being intersected in all drillholes, mineralization is considered to be open at depth and along strike, in addition to the up-dip potential.

There could also be potential for blind mineralization, with alteration and Fe staining noted along an overall strike of 11 km, with the ~9 km strike length of Al Halahilah rhyolite dome mineralisation (as mapped by the USGS) being within the area of interest.

## 1.2 Structure of this Information Memorandum

This Information Memorandum is structured in two main parts as follows:

### PART A: GENERAL INFORMATION

- Section 2 provides information about the Site;
- Section 3 introduces the Data Room, an online resource with further information about the license opportunity, including geological survey data as well as the Application Form to be submitted by bidders as part of their Proposal;

### PART B: PROPOSAL SUBMISSION RULES

- Section 4 sets out the Minimum Qualification Criteria that bidders must meet in order for their Proposals to be further evaluated for the Project;
- Section 5 sets out the Licencing Round process and Proposal requirements including the criteria and scoring methodology; and
- Section 6 provides additional information regarding participation in the Licensing Round and submission of a Proposal.

## 1.3 Key Dates

The table below sets out the key dates relating to the Licensing Round. All dates set out in this Information Memorandum are subject to change at the Ministry's absolute and sole discretion. Any revised dates will be notified to bidders through email to the confirmed address(es) submitted by the bidders to the Ministry in their expression of interest submission.

**Table 1: Key Dates**

<b>Date</b>	<b>Process stage</b>
17:00 (Riyadh time) 01 <sup>st</sup> May 2024	Proposal Submission Deadline
23 <sup>rd</sup> May 2024	Announcement of outcome of the Proposal Stage
23 <sup>rd</sup> May 2024	Announcement of the Successful Bidder

The Ministry will be available continuously to support bidders through each stage of the Licensing Round.

## 2. The Site

### 2.1 Location

Al Halahilah (centered at approximately 17°42' N, 43°57' E) covers an area of ~35 km<sup>2</sup> in the southern region of the Kingdom (Figure 1). The Project area is close to several small towns, including Harshaf to the west, and the nearest major center, Najran, is located ~35 km to the east-southeast. The western boundary of the Project area is readily accessible by sealed roads, and tracks along wadis allow access within the block. The Project covers an area of high relief, with steep strike ridges and local relief reaching up to 200 m (Figure 1). The main identified mineralized trend is coincident with a north-south trending wadi.

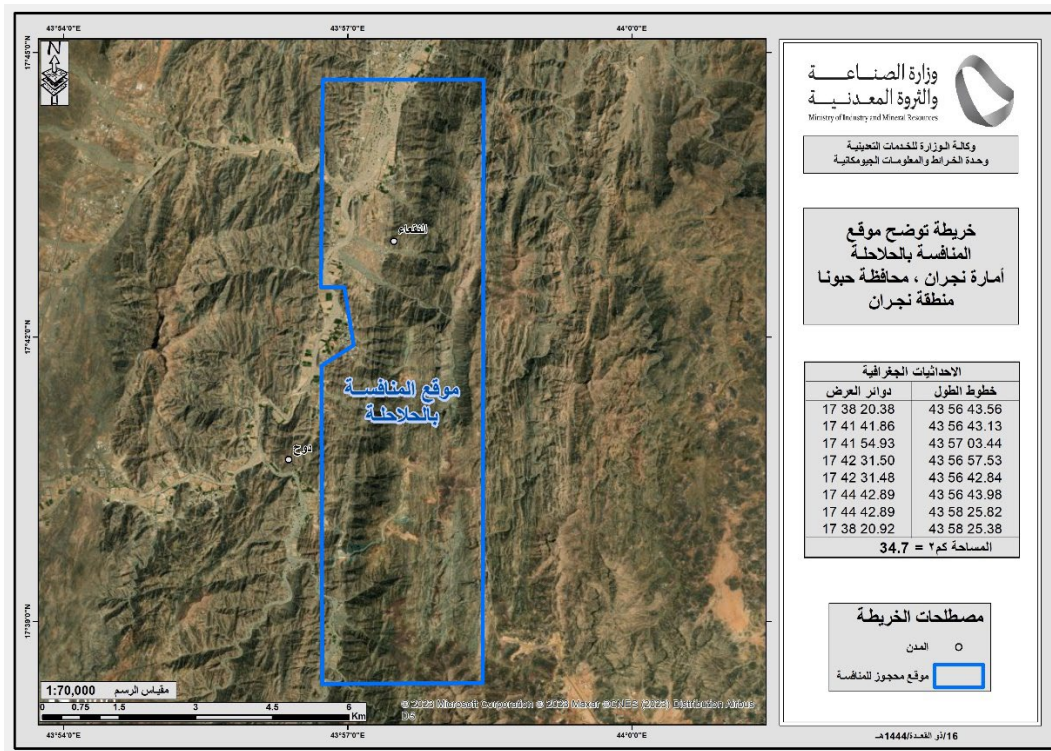


Figure 1: Project location.

Table 2: The Site Coordinates

Point	Latitude	Longitude
1	17° 38' 20.38	43° 56' 43.56
2	17° 41' 41.86	43° 56' 43.13
3	17° 41' 54.93	43° 57' 03.44
4	17° 42' 31.50	43° 56' 57.53
5	17° 42' 31.48	43° 56' 42.84
6	17° 44' 42.89	43° 56' 43.98
7	17° 44' 42.89	43° 58' 25.82
8	17° 38' 20.92	43° 58' 25.38

## 2.2 Exploration History

Exploration activity completed in the Project area to date is summarized in Table 3. The most recent fieldwork was completed in 1989.

The earliest activities at Al Halahilah included artisanal ancient Cu/Zn mining, exploiting near-surface gossanous material. These sites were rediscovered by Riofinex as part of a broader, country-wide geological mission, during which several prospective areas were assessed (Riofinex 1979, Parker 1982). At Al Halahilah, this work was undertaken between 1978 and 1981. Initial activities involved regional geochemical sampling, with 6,477 wadi sediment samples being collected over an area of ~1,700 km<sup>2</sup> and analyzed for Cu, Pb, Zn, Ni, cobalt (Co), Fe, and manganese (Mn).

Over 100 prospects and anomalies were identified as a result of this geochemical sampling (including the rediscovery of ancient workings), including Al Halahilah (MODS 2025) and Al Halahilah South (MODS 2027). Prospect-scale work was subsequently undertaken, with initial activities including gridding, geological mapping at 1:1000 scale, ground magnetic surveying, and rock-chip sampling. Rock-chip sampling returned results of up to 7.8% Cu, 7.2% Pb, 31.5% Zn, 22.5 g/t Au, and 175 g/t Ag. This work was followed by a drilling campaign in 1980–1981, during which seven diamond drillholes (785 m total) were drilled at Al Halahilah, and a further three (387 m total) at Al Halahilah South (Table 2, Figure 2; Parker 1982).

Limited IP/SP surveying has been undertaken at both prospects; however, this was carried out after drilling, and the anomalies defined were coincident with known mineralization.

The final stage of the Riofinex work was a review undertaken in 1983–1984 by D. M. Ransom. Recommendations from this review included the suggestion of an extra three drillholes to test mineralization at Al Halahilah; however, this was not implemented.

The United States Geological Survey (USGS) was first involved in the mapping and compilation of 1:100,000 geological maps in southern Saudi Arabia in the 1970s to early 1980s (Conway 1981, Fairer 1981). These maps were used in the production of the later 1:250,000 maps in the early to mid-1980s (Ransom 1984). The USGS published a subsequent assessment and review (USGS-TR-10-1) in 1989, which also included a geochemical survey (Carten and Tayeb 1989). The report included 416 samples covering Al Halahilah and the Kutmah dome to the immediate east (located outside the tender area). Assay results (typically Cu, Pb, Zn, arsenic (As), Au, and Ag) are available for 107 samples at Al Halahilah and Al Halahilah northeast Au occurrence (MODS 4902) but not for the other 309 samples. For the samples with available assay results, 30 were obtained from channel sampling at the Au prospect, and the other 77 were distributed throughout the broader area. Sampling identified elevated values for precious and base metals away from the drilled prospects, largely along the western contact of Al Halahilah dome, as mapped by USGS.

Evidence of recent quarrying can be seen on Google Earth; however, this is not located along the mineralized trend and appears to be shallow surface scraps, possibly for aggregate or road base.

**Table 3: Summary of past exploration (latest at the top).**

Key Reports	Entity	Location	Activities
USGS-OR-96-1	USGS 1995 AD 1416 AH	Regional	Report on the USGS Mission to the Kingdom. Reiterates previous work and conclusions. No new information for the Project area.
RF-OF-02-22 RFO-1979-2	Riofinex 1978-1981 AD 1398-1401 AH	Regional	Reconnaissance activities, covering areas identified from a review of previous geological data. 1:50,000 geological mapping. 6,477 regional wadi samples over an area of 1,700 km <sup>2</sup> . Prospects identified were gridded, mapped at 1:1000, and geochemically sampled. Areas of interest were subsequently drilled and targeted for geophysical surveys (SP, IP, magnetic).
RE-OF-02-22 RFO-1979-2 DPI-OF-04-1	Riofinex 1978-1981 AD 1398-1401 AH	Al Halahilah	Ancient workings rediscovered. Gridded an area of ~7,000 m (NS) x 400 m (EW) in Al Halahilah and Halahilah South. Mapped at 1:1000 scale from 850S to 300N; extent of geochemical sampling unknown. No geographic collar coordinates for drilling in the reports; however, a reasonable estimate of position has been given. Magnetics—50 m line spacing, 25 m station spacing. Diamond drilling (seven holes for a total of 785 m) over a strike length of 750 m. Drillhole data used to estimate a resource of 1.04 Mt @ 0.44% Cu, 2.99% Zn, 0.45 g/t Au, and 25.2g/t Ag. VMS-style mineralization with intersections up to 9.8 m, averaging ~2.9 m of mineralization over all drillholes. SP—50 m spaced EW lines between 000N and 500S, 10 m station spacing (carried out after drilling). IP— Line 200S, 20 m dipole, identified a chargeability anomaly of 64mV/V.
RE-OF-02-22 RFO-1979-2 DPI-OF-04-1	Riofinex 1978-1981 AD 1398-1401 AH	Al Halahilah South	Similar work program as for Al Halahilah and same grid. Ground magnetic survey from 2400S to 6200S on 200 m line spacing with 50 m station intervals, followed by infill surveying with 100 m x 10 m data spacing. SP—100 m line spacing, 10 m station spacing. A persistent 100 mV negative anomaly was identified on lines 3400S to 4000S, coincident with the locations of massive

Key Reports	Entity	Location	Activities
			sulfides. IP—seven grid lines, 3400S to 4000S, high-chargeability, low-resistivity anomaly associated with massive sulfides. Three diamond drillholes for a total of 387 m at 200 m spacing. Narrow intercepts of weak to moderate grade base metals.
RE-OF-05-5	Riofinex 1983-1984 AD 1403-1404 AH	Al Halahilah (independent report by D. M. Ransom), regional and prospect reassessment	Independent review of the available data and work at Al Halahilah, including recommendations that have not yet been implemented. Interpretation that mineralized shoots plunge south at 40°-50°. Includes petrological report by 1 Pontifex. Revisited earlier regional work (outside of the area of interest), and some re-assaying carried out using lower Limit of Detection (LOD) methods.
Various 1:100k Sheets, including USGS-OF-02-1, USGS-OF-01-4	USGS 1973-1981 AD 1393-401 AH	Regional	Regional mapping and compilation of 1:100,000 map sheets, which were later compiled into 1:250,000 sheets.
USGS-TR-IO-I	USGS 1988-1989 AD 1409-1410 AH	Regional, focusing on the Halahilah Mineral Belt	Regional geochemistry, including rocks, and a reassessment of the prospectivity of Al Halahilah deposits and region. Included at least 416 samples, with assay results recorded from 77 samples from Al Halahilah and 30 from Al Halahilah NE Au prospect (MODS 4902). Assays not available for the other 309 samples.
BRGM-OF-04-11 BRGM-TR-0539	BRGM 1980-1985 AD 1401-1406 AH	Regional	Geophysical map interpretations and compilations, regional VMS metallogeny.

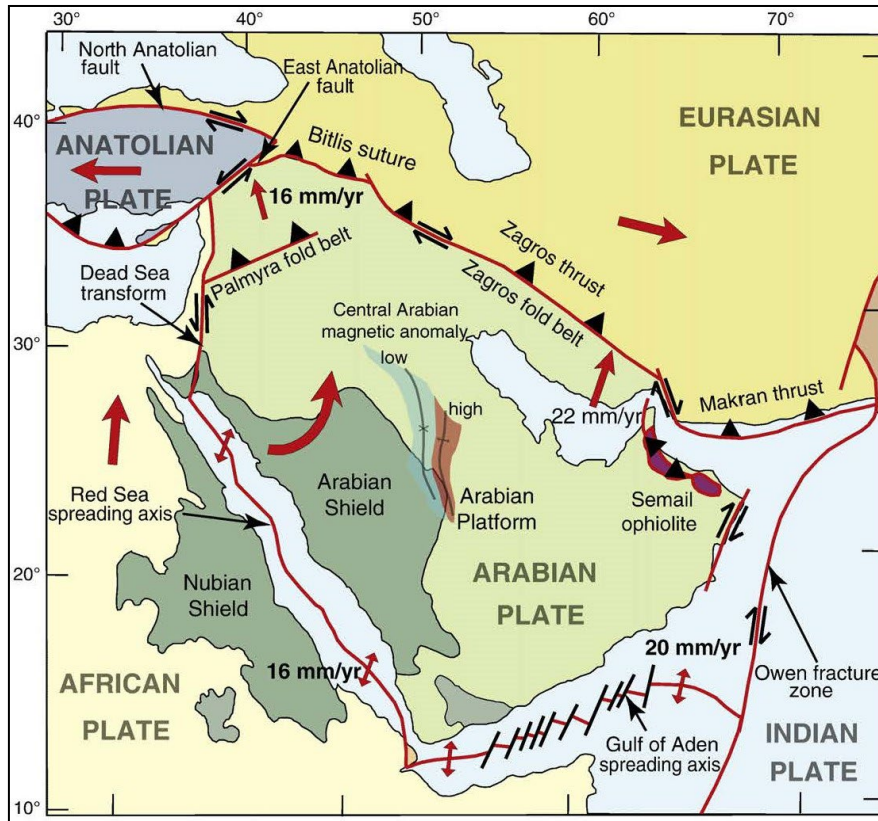
Source: National Geoscience Database of Saudi Arabia (NGD)

## 2.3 Geology and Mineralisation

### Tectonic Overview

The Project area is located on the Arabian Platform within the Asir Terrane and is regionally highly prospective for several different mineralization styles, including VMS. The tectonic evolution of the Kingdom is fundamental for the formation of various deposit styles across the region. The Arabian Plate can be divided into two main regions: the Arabian Shield and the Arabian Platform (Figure 2). The Arabian Shield, a segment of the Arabian-Nubian Shield (ANS), separated from the Nubian Shield to the west during

ripping and extension in the Red Sea from ~30 Ma (Bosworth 2015, Hamimi, Fowler et al. 2021). The Arabian Platform comprises layered Phanerozoic rocks, with thicknesses of up to 10 km, which were deposited on the Arabian Shield. The rock units and structures of the shield can be traced beneath the Phanerozoic cover rocks using magnetic anomalies, and they extend up to 300 km laterally from the exposed shield margins (Hamimi, Fowler et al. 2021).



**Figure 2: Tectonic framework of the Arabian Peninsula, showing plate boundaries, relative plate motion vectors, and major fault zones (Stern and Johnson 2010).**

The ANS underwent a complex geological evolution spanning over 300 Myr (Figure 3) (Stern and Johnson 2010). The juvenile crust of the ANS formed in primitive arc systems throughout the existence of the Mozambique Ocean, which opened as a result of the break-up of the Rodinia supercontinent during 870–800 Ma (Mole, Barnes et al. 2018). The magmatic arcs, ophiolites, and clastic sedimentary rocks forming the ANS, including the Asir Terrane, were accreted on the margin of West Gondwana, gradually accumulating through a series of subduction-related events referred to as the Nabitah Orogeny (Stern and Johnson 2010). At 630–600 Ma, the accretionary margin of West Gondwana collided with East Gondwana, resulting in the formation of a major Neoproterozoic mountain belt, the East Africa–Antarctica Orogen (EAAO) (Stern 1994). The accretion resulted in the formation of tectonostratigraphic terranes that are separated by major north, northwest, and northeast trending suture zones or major northwest trending faults. The suture zones host serpentinized ultramafic rocks, which comprise dismembered ophiolites, along with synorogenic plutonic complexes and transpressional gneissic domes (Nehlig, Genna et al. 2002). This collisional event resulted in the formation of a vast mountain chain comparable to the present-day Alpine–Himalayan range.



The final stages of the EAAO's evolution were marked by movement along continental-scale shear zones (escape tectonics), orogenic collapse, crustal delamination, and the exhumation of gneissic domes and deposition of sediments at 600–550 Ma (Hamimi, Fowler et al. 2021). Following the assembly of the newly amalgamated arc terranes, volcano-sedimentary assemblages were deposited in post-amalgamation basins from ~650 Ma (Figure 4) (Johnson, Andresen et al. 2011).

The Arabian Shield is partially overlain by Phanerozoic rocks, including Lower Paleozoic siliciclastic and Mesozoic–Cenozoic siliciclastic and volcanic rocks (Haq and Al-Qahtani 2005). These Phanerozoic sedimentary rocks host significant mineral deposits, such as phosphates, evaporites, and potentially stratabound Zn-Pb deposits. Carbonate replacement-type Zn-Pb-Ag deposits are also developed in the limestones of the Red Sea coast (Taylor, Schulz et al. 2005).

Early Cambrian uplift led to widespread erosion, and subsequent Cambrian–Devonian sequences were typically deposited on a peneplaned platform (Konert, Afifi et al. 2001). Gentle subsidence during the Late Cambrian and Early Ordovician was followed by increased subsidence during the mid-Ordovician, which led to marine transgressions (Sharland, Archer et al. 2001).

During the Late Ordovician, a glacial episode occurred while the Arabian Plate resided at a relatively high southern latitude. The plate started to drift northward into lower latitudes in the Early Devonian, reaching tropical environments by Permian times (Konert, Afifi et al. 2001). The Late Silurian saw uplift, broad regression, and stratigraphic gaps on the Arabian Platform (Sharland, Archer et al. 2001).

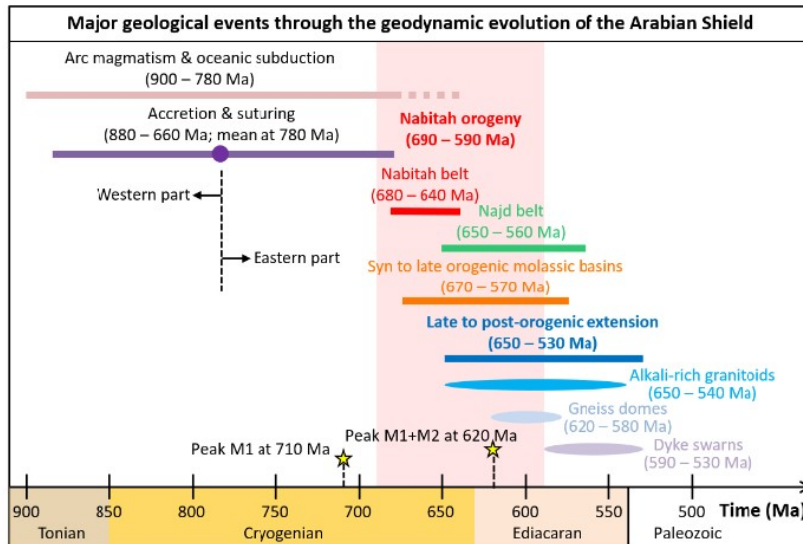
The Hercynian Orogeny (the Late Devonian–Permian diastrophism in Europe and North America) resulted in multiple phases of compression and block faulting (Konert, Afifi et al. 2001). Back-arc rifting and basaltic eruption occurred in the northern margin of the Arabian Shield. The compression, uplift of central Arabia, and clockwise plate rotation resulted in widespread inversion and erosion, leading to the removal of several kilometers of sediment from uplifted areas (Konert, Afifi et al. 2001).

During the early Permian, another phase of major crustal extension weakened the crust enough to allow sediment load alone to drive subsidence and facilitate the accumulation of thick carbonate sediments in subtropical latitudes. In the Late Permian, further rifting and block faulting along the northeastern front of the Arabian Plate resulted in the initiation of continental break-up and the development of a passive margin along most of the northeastern boundary of the plate, fronting the newly opened Neo-Tethys Ocean. During this period, sedimentation on the Arabian Platform was dominated by carbonates over a break-up unconformity. The subsidence at the northeastern passive margin was initially largely post-rift thermal and then replaced by sediment loading (Bishop and Al-Husseini 1995).

Rifting also began in the central Mediterranean during the Early Jurassic, affecting the northern part of the Arabian Plate. Jurassic rifting at the northwestern boundary of the plate led to the later development of a new passive margin and the creation of accommodation space along the subsiding shelf (Sharland, Archer et al. 2001). The Mediterranean rifting continued into the Early Cretaceous and may have been partially responsible for uplift in western Arabia (Haq and Al-Qahtani 2005).

Before the Eocene the ANS formed the northernmost corner of the African continental plate, which moved progressively northward toward Eurasia, resulting in the closure of the Tethys Ocean. The Arabian Plate separated from the African Plate with the opening of the Red Sea and the development of the Gulf of Aden

rift system at 35–30 Ma. Rifting was centered in the Afar region of Ethiopia, where a mantle plume resulted in volcanism and uplift from ~45 Ma, with peak activity at ~30 Ma (Bellahsen, Faccenna et al. 2003).



**Figure 3: Chronology of major geological events through the geodynamic evolution of the Arabian Shield (Bonnetti, Fontaine et al. 2023).**

### Asir Terrane

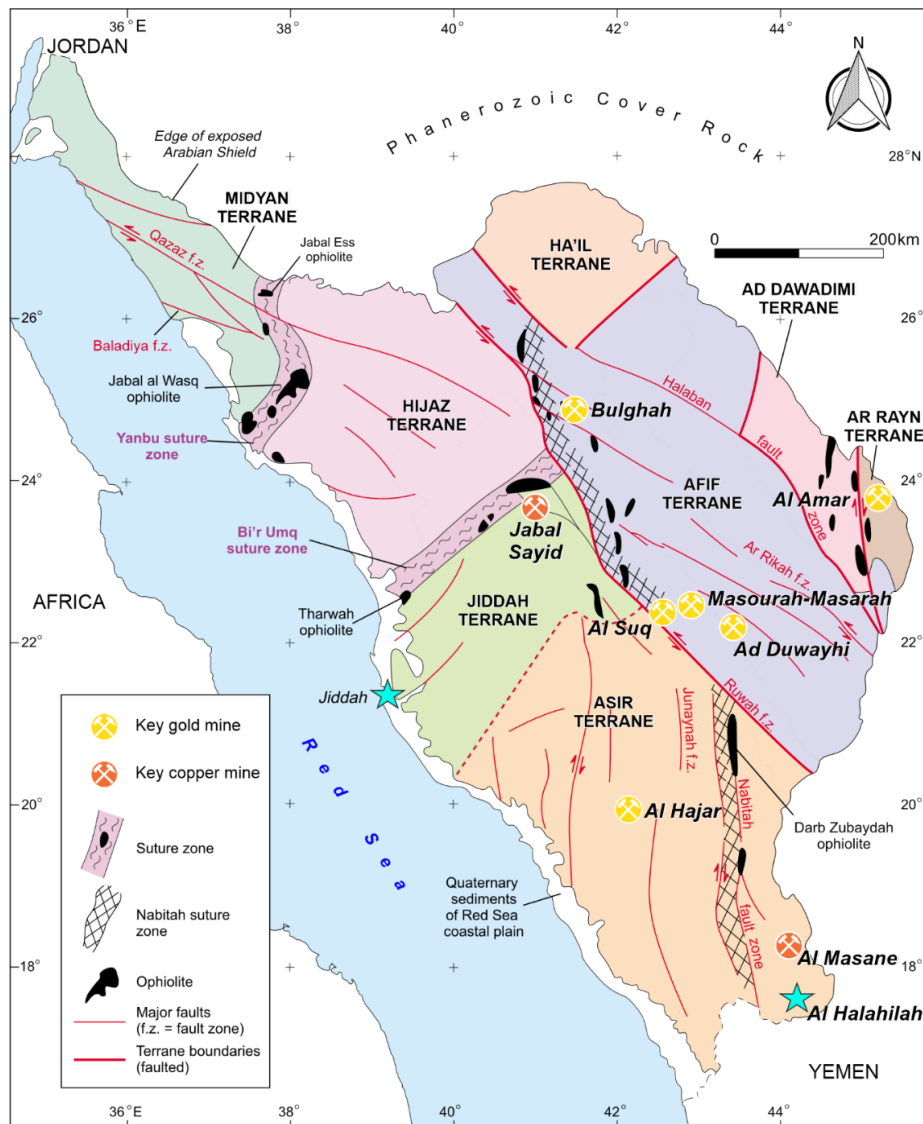
Al Halahilah is located at the southern terminus of the Asir Terrane within the Khadra structural belt, which forms the southern end of the Nabitah suture zone (Figure 4). The Asir Terrane is dominated by deformed Proterozoic bimodal volcanic and sedimentary rocks of the Halaban Group, three main groups of orogenic to post-orogenic igneous bodies, and a suite of mafic intrusive rocks of non-uniform age. The volcano-sedimentary strata have been dated at 780–740 Ma, with intrusive complexes ranging in age from 735 to 625 Ma. Younger units include remnants of the unconformably overlying, gently eastward dipping beds of the Cambro-Ordovician Wajid Sandstone, Cenozoic basalts, and eolian sandstones of the Rub’el Khali Basin, which cover the Arabian Shield to the east.

The rocks of the Asir Terrane are highly deformed and have been affected by isoclinal north trending folds and ductile shear zones. Metamorphosed volcanic, sedimentary, and plutonic rocks developed owing to the assembly of oceanic plateau, island-arc, and spreading-center deposits that crop out in two large north trending structural belts, i.e. the Tarib (>720 Ma) and An Nimas (840–810 Ma) arcs. The arc deposits were intruded by large volumes of arc-related calc-alkaline diorite, tonalite, granodiorite, and trondhjemite, as well as two phases of syn-tectonic orthogneiss. The younger orthogneiss phase has been dated at 680–640 Ma (Stoeser and Stacey 1988). The assembly of the Asir Terrane is estimated to have occurred at 720–680 Ma, thereby post-dating the formation of the Tarib arc and the emplacement of the younger orthogneiss phase (Johnson and Kattan 2001). Numerous Au and base-metal mineral deposits of varying mineralization styles occur throughout the Asir Terrane. The terrane also hosts several well-known VMS mineral belts, including:

- the Ar Rjum VMS belt;

- the Muhadad VMS belt;
- the Wadi Bidah VMS belt;
- the Wadi Shwas VMS belt;
- the Kutam–Al Masane VMS belt; and
- the Ash Shib VMS belt.

The Project area lies within the Kutam–Al Masane VMS belt (Figure 5).



**Figure 4: Simplified geological map of the Arabian Shield, showing the locations of key mines within the Kingdom. Major tectonostratigraphic terranes are delineated by sutures and major fault zones. The Project is located within the Asir Terrane, toward the southeastern corner of the map. Modified after Nehlig at al. (2002).**

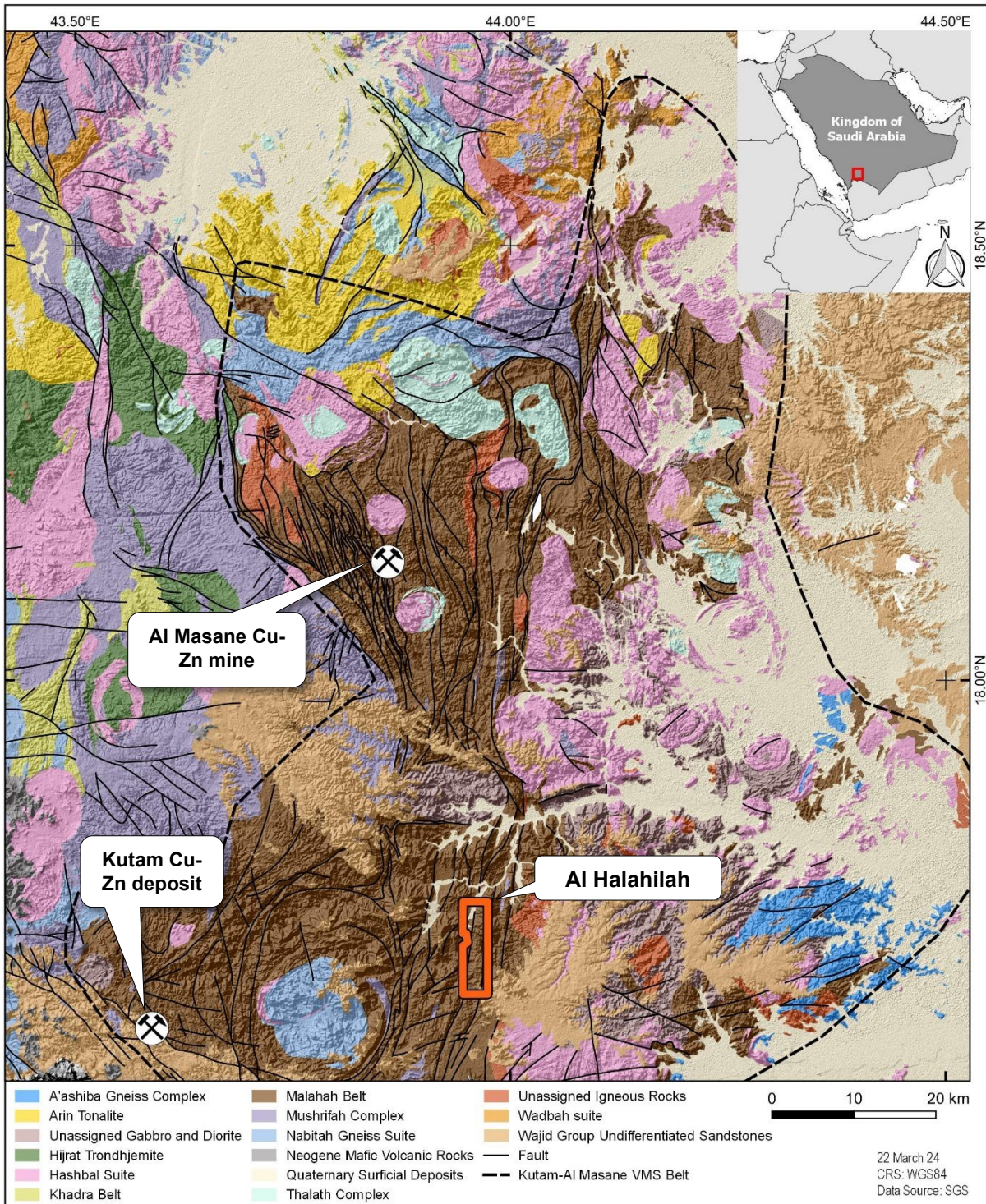


Figure 5: Kutam-Al Masane VMS Belt. The Project area is in southern part of the image (Workman et al., 2016)

### 2.3.1 Local Geology

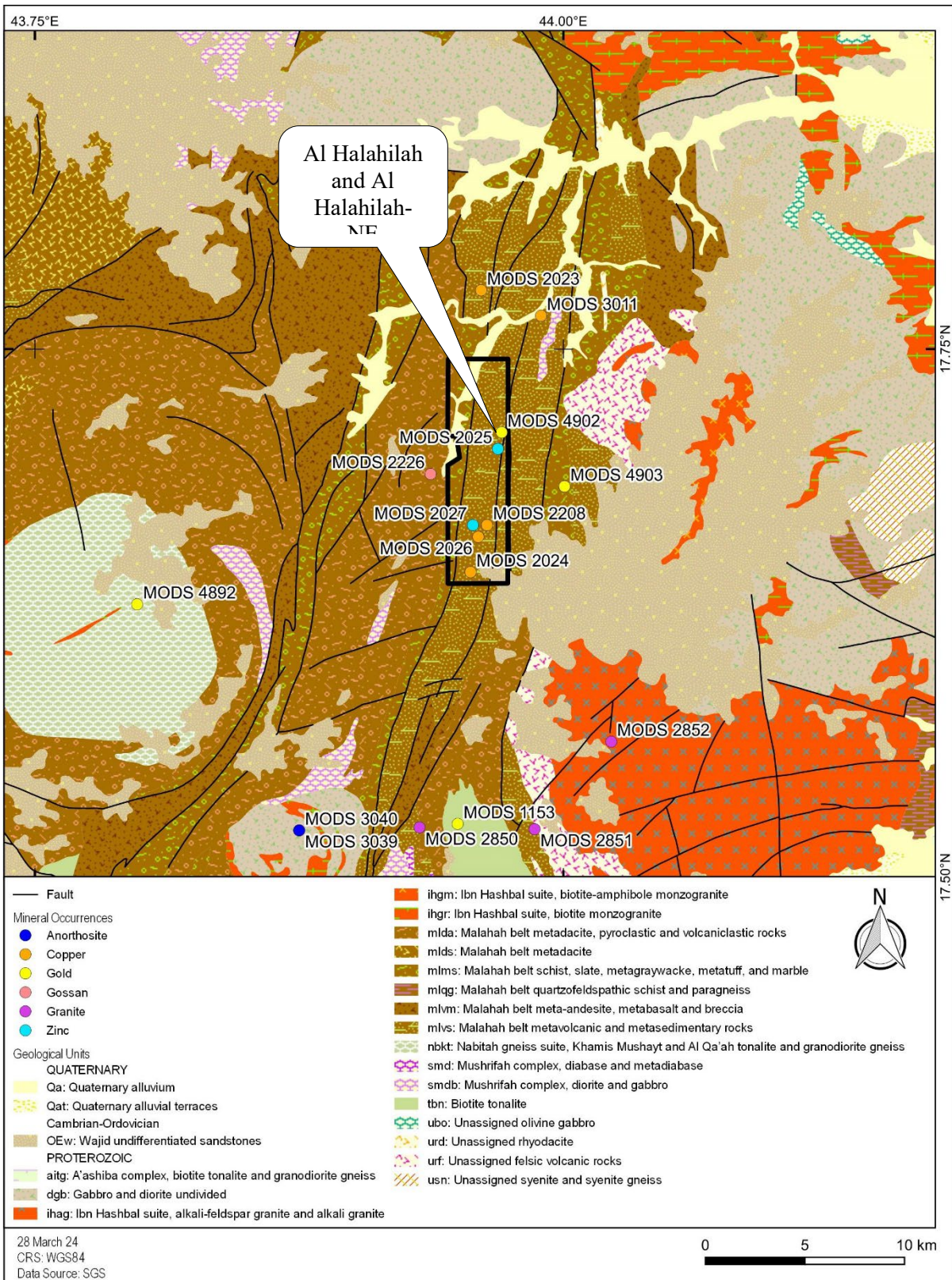
The Project consists largely of Halaban Group rocks, which represent the oldest rocks exposed in the Asir Terrane. The Halaban Group comprises mainly interbedded volcanic and sedimentary rocks. Stratigraphic relationships are frequently obscured owing to faulting along lithological contacts, deformation, and greenschist facies metamorphism of protoliths, along with the development of pervasive schistose fabrics. Bedding and structural fabrics are typically subvertical to steeply east dipping and close to north-south striking, subparallel to the north-northeast trend of the Khadra structural belt (Figures 2 and 3).

The main Halaban Group units within the Project area (Figure 6) form part of the Malahah Belt, which is sandwiched between the post-orogenic Tarib Batholith and the Hadadah Pluton. The north-northeast structural trend of the Khadra structural belt is clearly expressed by faults within the Malahah Belt. Two main structural blocks are located within Al Halahilah Mineral Belt, separated by the north-south trending Ashara Fault Zone, which is to the west of the mineralization.

According to the explanatory notes for the Najrah Quadrangle 1:250,000 geological map sheet, the main Halaban Group units in the western block include (from oldest to youngest):

- A lower basaltic-andesitic flow unit;
- An overlying mixed epiclastic/mafic volcanic unit;
- An epiclastic unit, including chert and predominantly fine-grained sedimentary rocks; and
- A largely dacitic unit at the top of the succession.

Dolomitic units were also noted at the stratigraphic position of the mineralization during mapping, and later work interpreted this as dolomitic alteration associated with the mineralization. Subsequent interpretations have also suggested the occurrence of a second cycle of bi-modal volcanism in the eastern block at Al Halahilah (Carten and Tayeb 1989). Mineralization is interpreted as being associated with a rhyolite dome (Figure 2) that intrudes unconsolidated epiclastic sediments of the Halaban Formation and an overlying basalt (the Khudarah Basalt), which is considered contemporaneous with the rhyolitic magmatism associated with the mineralization and related to the postulated second cycle of bi-modal volcanism. There is consensus that the tectonic setting evolved as a rift basin marginal to a volcanic arc or a mid-ocean rift proximal to oceanic islands.



**Figure 6: Al Halahilah geology and mineral occurrences. Source: NGD and Geological Map of the Najran GM-078A 1:250,000 Sheet 1, KSA.**

## 2.3.2 Mineralisation

### Kutam – Al Masane VMS Belt

Al Halahilah lies within the Kutam–Al Masane VMS belt, which covers 8,000 km<sup>2</sup> of the southern Asir Terrane. The belt is mainly composed of Malahah Belt rocks and associated Halaban Group rocks. Key mineral deposits within the belt are Al Masane and Kutam deposits (Figure 5); however, examples of VMS mineralization can be found between Nuqrah to Najran.

The mineralization of Al Masane deposit varies from thinly bedded Zn-rich massive sulphide, Cu-rich massive sulphide, sulphide breccia, and massive pyrite, as well as disseminated or interbedded sulphides. The deposit does not have an underlying zone of stringer mineralization (Workman, Hawke et al. 2016).

At Kutam, the mineralization consists of disseminated and stringer chalcopyrite and sphalerite in quartz-sericite and quartz-chlorite schists near the contact with a large intrusion of felsic quartz-feldspar porphyry (Workman, Hawke et al. 2016).

## 2.3.3 Nearby Occurrences

Gold and base metal mineral occurrences (MODS) are distributed throughout the Malahah Mobile Belt within and surrounding the Project (Table 4, Figure 5).

**Table 4: Summary of Mineral Occurrences (MODS)**

MODS	English Name	Longitude (WGS84)	Latitude (WGS 84)	Region	Major Metal	Minor Metal	Workings	Geological unit	Host rocks	Geology	Morphology
MODS 1153	JABAL ADAF (ALSHARA)	43.95000000	17.52527778	Najran	Au		Dump; Trench	Tonalite-diorite suite	carbonate; dolerite; porphyry	Unclassified	veins
MODS 2023	ALMAJMA	43.96111111	17.77777778	Najran	Cu	Zn, Gossan	Adit	Halaban group	dolomitic limestone; quartz porphyry; quartz-sericite schist (hydroth)	Auriferous quartz-vein	DISSEMINATION; Massive Bed; veins
MODS 2024	AL MUSSAYYAB	43.95611111	17.64444444	Najran	Cu	Zn	Slag area; Trench	Halaban group	andesitic tuff; carbon schist; dolomite; quartz-sericite schist (hydroth); rhyolitic tuff	Unclassified	veins
MODS 2025	AL HALAHILA (AL HALAHILA)	43.96905556	17.70275000	Najran	Zn	Cu, Pb, Au	Adit; Slag area	Halaban group	andesitic tuff; carbon schist; dolomite; rhyolitic tuff	Volcanic	DISSEMINATION; lenses; Massive Bed; Strata Bound

MOD S 2026	AL MUSSAYYA B-N	43.95972222	17.66111111	Najran	Cu	Pb, Zn, Gossan	Slag area; Trench	Halaban group	andesitic tuff; dolomite; quartz-sericite schist (hydroth); rhyolitic tuff	Unclassified	veins
MOD S 2027	AL MUSSAYYA B-N1 (AL HALAHILA)	43.95722222	17.66666667	Najran	Zn	Cu	Trench	Halaban group	andesitic tuff; dolomite; quartz-sericite schist (hydroth); rhyolitic tuff	Stratiform deposits	DISSEMINATION
MOD S 2208	AL MUSSAYYA B-NE (AL MADDAH)	43.96388889	17.66666667	Najran	Cu		Trench	Halaban group	andesite; andesitic tuff; chlorite schist; dolomite; rhyolitic tuff	Hydrothermal	DISSEMINATION; lenses; Strata Bound; veins
MOD S 2226	(AN NUGGAR) AN NAQA	43.93722222	17.69083333	Najran	Gossan	Cu, Pb, Zn	Undefined	Halaban group	gossan; quartz-sericite schist (metam)	Unclassified	Stratiform; Massive Bed
MOD S 2850	JABAL ADAF-W (RED AZIZ OR AHMAR AZIZ)	43.93194444	17.52361111	Najran	Granite		Undefined	Halaban group	granite; metadiorite; metagabbro	Granitic intrusions	Massive
MOD S 2851	WADI HIJAR (AN NAJUF)	43.98638889	17.52277778	Najran	Granite		Quarry	Halaban group	granite; rhyolite-dacite fels	Granitic intrusions	Massive
MOD S 2852	BIR ASKAR	44.02266667	17.56419444	Najran	Granite		Undefined	Granite-syenite suite	granite; Felsic volcanics	Granitic intrusions	Massive
MOD S 3011	KITNAH (AL MAJMA SOUTH)	43.98944444	17.76577778	Najran	Cu	Au, Ag, Pb, Zn	Adit	Halaban group	quartz porphyry; quartz-sericite schist (hydroth)	Hydrothermal	veins
MOD S 4892	BIR ASH SHADQA (AL ASHAYAB EAST)	43.79833333	17.62916667	Najran	Au	Cu, Zn	Pit	Tonalite-granite suite	volcanic rock (extrusive rock)	Hydrothermal	veins
MOD S 4902	AL HALAHILA H-NE (AL HALAHILA)	43.97083333	17.71055556	Najran	Au	Cu, Zn	Undefined	Halaban group	andesitic tuff; dolomite; quartz-sericite schist (hydroth); rhyolite s.l.; rhyolitic tuff	Unclassified	DISSEMINATION; lenses; Strata Bound
MOD S 4903	WADI KUTNAH (KUTNAH DOME)	44.00055556	17.68500000	Najran	Au		Undefined	Undefined	sedimentary rock	Hydrothermal	stockwork veins



MOD S 3039	WADI THAYALIB AH SHAIB ATH THUAYLIB AH)	43.87500000	17.52222222	Najran	Anorthosite		Undefined	Undefined	anorthosite ; diorite	Unclassified	Massive
MOD S 3040	WADI THAYALIB AH (SHAIB ATH THUAYLIB AH)	43.87500000	17.52222222	Najran	Anorthosite		Undefined	Undefined	acid to intermediate pyroclastic rocks; anorthosite ; diorite; monzogranite	Unclassified	Massive
MOD S 3103	WADI THAYALIB AH (SHAIB ATH THUAYLIB AH)	43.87500000	17.52222222	Najran	Anorthosite		Dump	Undefined	anorthosite ; gabbroic plutonic rocks; hornblende diorite	Unclassified	Massive

Source: National Geoscience Database (NGD) of Saudi Arabia

### 2.3.4 Project Mineralisation

Mineralization in the Project area is dominantly VMS style and has been interpreted by USGS geologists as being associated with rhyolite domes that formed in a hypabyssal setting below the seafloor (Figure 3). The mineralization is exposed as a ~1,000-m long gossan, with several ancient Cu workings in the area. Mineralization has been intersected over a strike length of ~750 m during drilling (discussed below) and remains open along strike and at depth. This zone forms part of an ~11-km long zone of alteration and Fe staining.

Disseminated (stringer style), quartz-pyrite vein-hosted, replacement style, and banded massive sulfide mineralization styles have been identified, with the latter two types typically being located in dolomite alteration zones near the contacts between the rhyolite dome and the Khudara Basalt. These zones form a series of lenses along the strike of the mineralized horizon.

It has been suggested that mineralization and dolomitization preferentially formed in zones of locally higher permeability, possibly hyaloclastite and intrusive breccias (Carten and Tayeb 1989). The massive sulfide Cu-Zn mineralization grades into a lower-grade and more Cu-rich stockwork zone. Sulfide minerals include pyrite, chalcopyrite, and sphalerite.

The mineralization is variable in width, with true widths of 0.45–13 m observed during drilling. At the surface, the average width of the gossan and ironstone unit is ~5 m, ranging from 1 to 40 m. Ransom (1984, RF-OF-04-5) suggested the presence of three lenses plunging at around 40° to 50° toward the south, although this has not been tested.

The Halahilah-NE Au prospect (MODS 4902; Figure 6) is located to the north of the main mineralized zone, where the mineralized zone narrows to a 2.0–7.5 m zone of brecciated rhyolite, with continuous quartz-sericite and argillic alteration over a strike length of 200 m. This zone has been interpreted as a sill that projects from Al Halahilah rhyolite dome.

### 2.3.5 Nearby Deposits

Al Masane Cu-Zn mine is located ~55 km north-northeast of the Project (Figure 5). The mine is currently exploited as an open pit (Guyan pit; Error! Reference source not found.) and underground, where development has focused on the Saadah and Al Houra orebodies. Operations extend 291 m underground (Al Masane Al Kobra Mining Co). Mining began in 2012 and, at the time of commissioning, the mineral resource was over 5 Mt (Table 4). The mine is currently producing ~800,000 tpa of Zn and Cu concentrates. However, as discussed in the 2022 Annual Report, an expansion plan, including the development of the Moeath orebody and expansion of the plant to 1.2 Mtpa, was initiated in 2019.

The Saudi Stock Exchange listed Al Masane Al Kobra Mining Company's (AMAK) 2022 Annual Report as confirming total JORC-compliant mineral resources of 7.51 Mt @ 0.94% Cu, 4.90% Zn, 1.06 g/t Au, and 38.13 g/t Ag, as of September 2022, with ore reserves of 7.04 Mt @ 0.65% Cu, 3.91% Zn, 0.81 g/t Au, and 29.73 g/t Ag. These figures are net of previously mined materials.

Similar deposits include the Noranda deposits of the Archean Abitibi Belt in Canada, which comprises over 22 individual deposits. These deposits are related to the bi-modal volcanic Noranda Cauldron, which is interpreted as a volcanic subsidence structure related to the collapse of an underlying magma chamber that initially formed a subsea shield volcano. Two groups of deposits are present. The first has resources that typically exceed 5 Mt, and these are associated with bi-modal volcanic rocks and located within the cauldron. The second group comprises larger deposits (the Home deposits), which are associated with rhyolitic breccias outside the cauldron. The latter are more Au-Cu rich and Zn poor than the former.

**Table 5: Al Masane mineral resources (2012), reporting code unknown (Workman et al., 2016)**

Classification	Tons (t x 1000s)	Zn (%)	Cu (%)	Au (g/t)	Ag (g/t)
Measured	535	4.0	1.5	0.83	23
Indicated	5,279	3.8	1.3	0.84	25
Inferred	108	4.0	1.1	1.13	30

These estimates do not account for recent mining activity.



Figure 7: Guyan open pit. Source: <https://amak.com.sa/>

### Kutam Cu-Zn Deposit

The Kutam Cu-Zn deposit is located ~40 km west-southwest of the Project (Error! Reference source not found., Error! Reference source not found.). Workman et al. (2016) note the following for the Kutam deposit:

*“The Kutam deposit is the largest in the entire belt and it has significant potential for expansion. This deposit (MODS 1128) is located within the southern Asir mountains. The ancient workings marking the deposit were discovered by the USGS in 1973 during a regional mapping program covering the half-degree Mayza Quadrangle (17/43B). The USGS subsequently carried out geological, geochemical, and geophysical surveys as well as drilling eight diamond drillholes totaling 1,929 m (Smith and others, 1977). Noranda obtained an exploration license for the area in 1976 and carried out more detailed geological mapping and geophysical surveying (ground and airborne), followed by the drilling of 15 cored holes (3,495 m). After Noranda completed its program, Riofinex carried out an economic assessment of the deposit and concluded that it was not viable if it was assumed that no additional tonnage or higher-grade mineralization would be discovered (Riofinex; 1978a). The metal zoning at Kutam was studied and Riofinex postulated that a high-grade copper stringer zone may exist at depth. A resource was estimated for the prospect that totaled 16.43 Mt grading 1.03% Cu, 0.51% Zn and 0.1 g Au/t (Lawson Gold Independent Technical Report, 2012). Coffey considered the resource estimate to have deficiencies however they recommended that the resource be considered as Inferred Resources. The resources were open to depth and Coffey recommended additional drilling at depth down plunge to potentially increase the resource base.”*

## 2.3.6 Exploration Data

### Regional Geophysical Data

Diverse geophysical data covering almost the entire Kingdom were available. Some of the data compilation included surveys flown by the USGS and still used for interpretation today; however, since 2006, many areas have been re-surveyed. Table 5 summarizes the acquisition parameters of various airborne geophysical surveys. Various data compilations were accessed primarily as processed grids to assess the quality of the data. The compilations are composed of surveys stitched together, rather than merged and blended, which reduces the overall quality of the data. Line spacings vary between 300 and 2,500 m, which is evident in the compilations despite gridding to a consistent cell size. All analyzed data were only available in basic corrected form (i.e. reduction to pole (RTP), first vertical derivative (1VD)) and as images (i.e. geotiffs). For enhancements and to filter the data to highlight attributes, original grid data are necessary.

**Table 6: Overview of available geophysical data.**

Survey Name	Method	Coverage (km <sup>2</sup> )	Line Spacing (m)	Grid size (m)
<b>Arabian Shield Magnetic Compilation</b>	Magnetic	Compilation	300-2,500	200
<b>Habla, Sukhaybarat, Najadi/Shabah and Najadi/Quartz Hill</b>	Magnetic, EM and Radiometric	952	200	50 (magnetic and radiometric)
<b>Al Hajar</b>	Magnetic, EM	748	250	no information available
<b>Wadi Bidah, Hamdah</b>	Magnetic, EM	4,236	250-300	50

### Magnetic Data

The magnetic data (total magnetic intensity, TMI) were provided alongside RTP, 1VD, analytical signal (AS), and tilt derivative enhancements. The compilation grids have been stitched together rather than blended, so the individual surveys are delineated, which gives the appearance of a change in resolution (Figure 8). This does not necessarily hinder interpretation; however, a coherent blended grid would allow further enhancements of the dataset without creating edge artifacts within the data during processing. An RTP magnetic grid may not reflect the location of source bodies owing to Kingdom's location relative to the magnetic equator. There appears to be discord between the analytical signal and RTP grids, implying that a reduction to equator (RTE) may have provided better results for accurately locating source bodies.

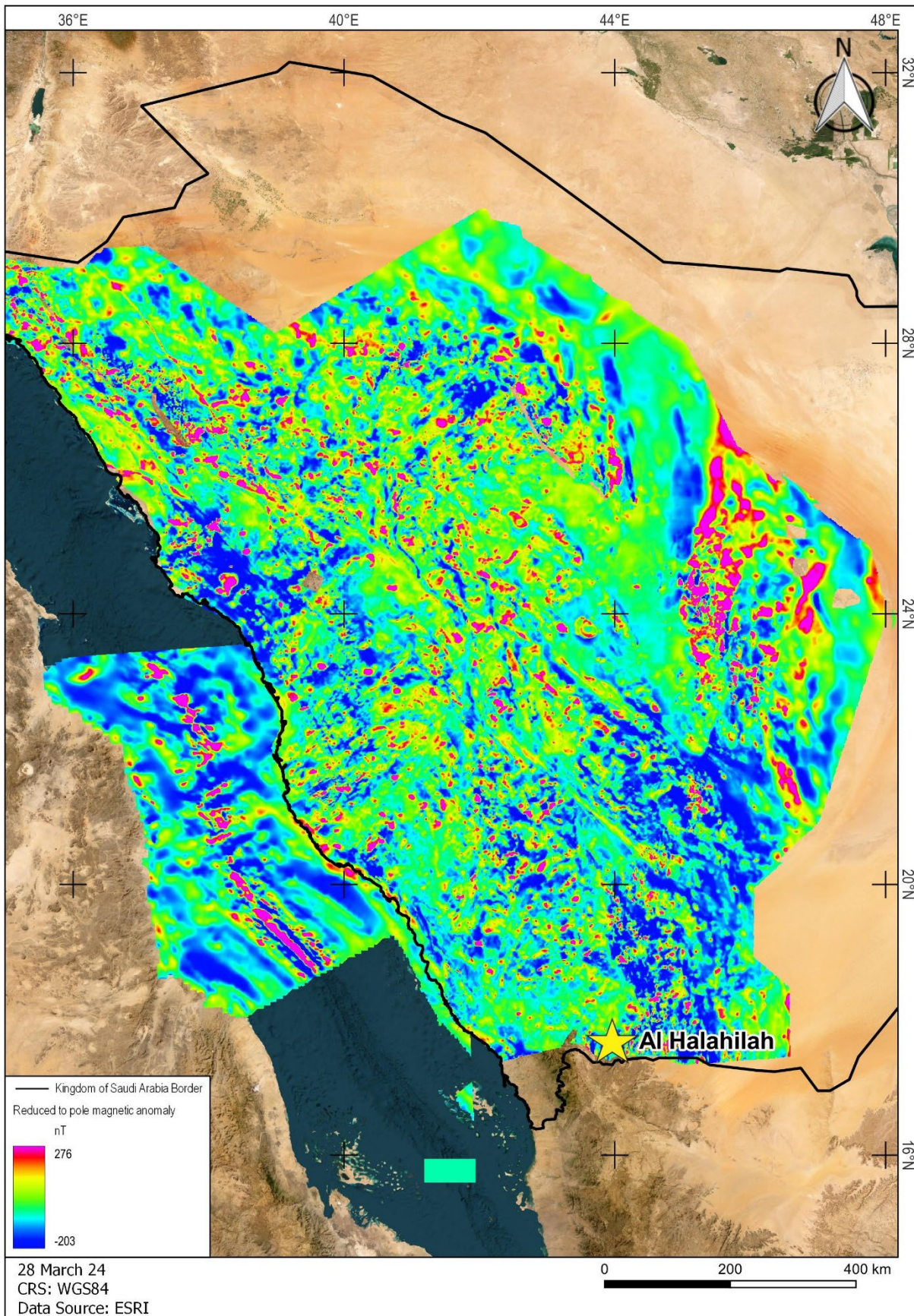


Figure 8: Magnetic data compilation available across the Kingdom.

## Gravity Data

Gravity data coverage was limited to imaging swaths western KSA and a thin section of the eastern coast (Figure 9). The resolution of the data was low (1,000 m) compared with the resolution of targets expected to be generated in this report. No further corrections or enhancements of the data were available beyond a Bouguer correction and free-air correction. Although there are some small-scale trends in the data, including these data in a regional study is problematic because the coverage is limited and often perpendicular to the structural trends of the region. However, gravity data highlighting the density contrasts between various lithologies at a resolution suitable for the target are likely to be particularly useful here.

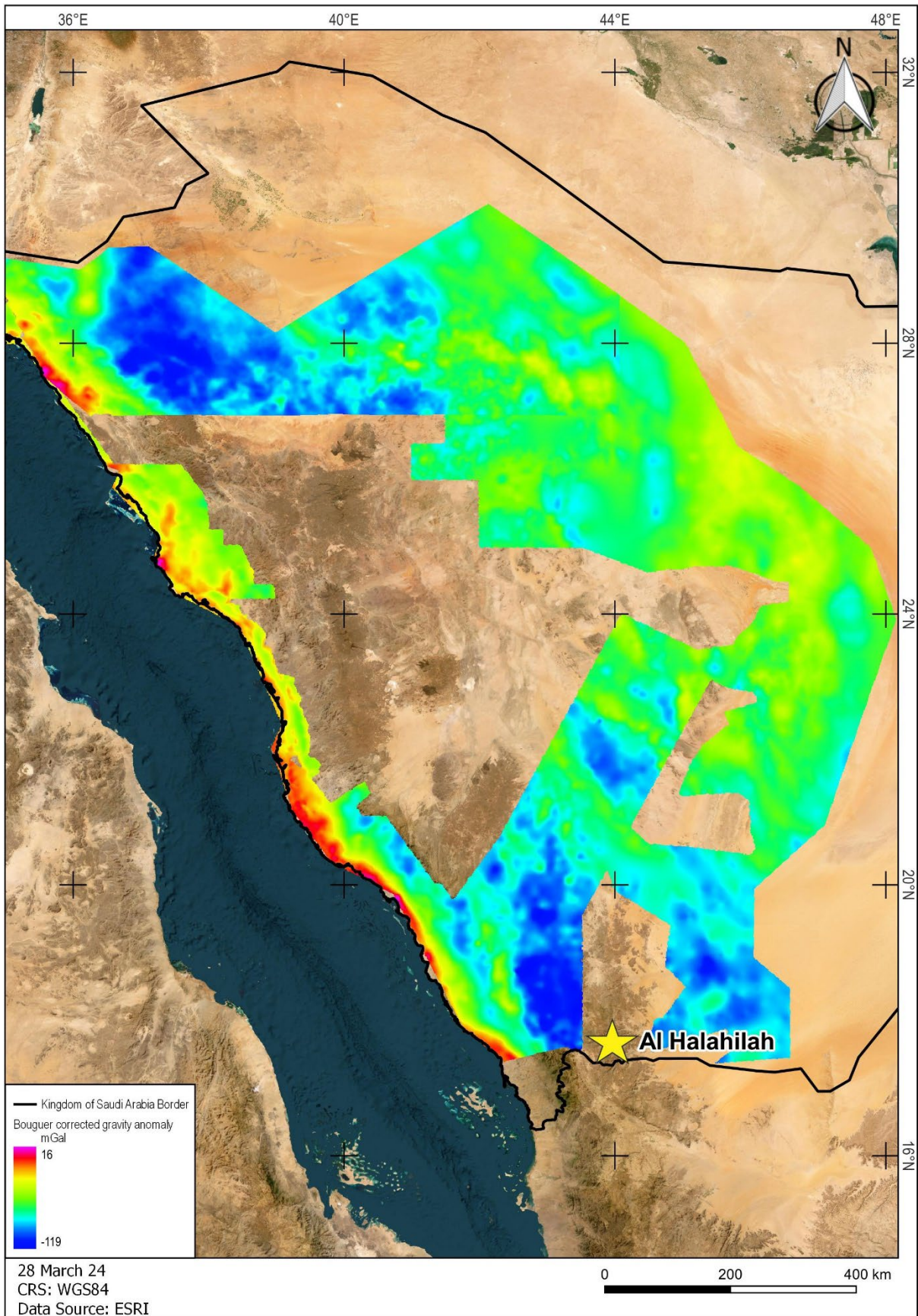


Figure 9: Gravity data coverage of the Kingdom.

### 2.3.7 Project Geophysics

Al Halahilah was surveyed using a magnetometer prior to drilling along east-west lines at intervals of 50 m, with stations every 25 m. A linear positive anomaly trending north-northeast was identified in an area with no rock exposure but colinear to exposed gossan further south. Limited IP/SP geophysical surveys were conducted after drilling, demonstrating anomalism coincident with sulfide mineralization (Riofinex 1979, Parker 1982). The dipole-dipole IP survey was carried out after drilling along line 200S and used a dipole size of 20 m. A high chargeability anomaly (>64 mV/V) and coincident low-resistivity response were interpreted to indicate massive to submassive sulfide mineralization. The SP survey was conducted over gossan zones along east-west lines at intervals of 50 m, with stations every 10 m. A negative anomaly was recorded between lines 100S and 300S, and irregular anomalies were noted south of line 300S. A low-magnitude anomaly above drillhole AH6 was attributed to deep weathering.

Exploration of Al Halahilah South involved magnetic and IP/SP geophysical surveys prior to drilling (Riofinex 1979, Parker 1982). Two magnetometer surveys were conducted, the first along east-west lines at intervals of 200 m, with stations every 50 m. A second, more detailed survey was carried out over an area of 0.2 km<sup>2</sup>, along lines at intervals of 100 m and with stations every 10 m. The results revealed a positive magnetic anomaly that ran parallel to and 30–50 m west of the main mineralized zone. An SP survey was conducted along lines at intervals of 100 m, with stations every 10 m, and identified a persistent negative anomaly with a peak coinciding with the mineralized zone. An IP survey employing a 20 m dipole size across seven grid lines identified a high-chargeability, low-resistivity anomaly that was coincident with the mineralized zone, indicating the presence of massive to submassive sulfides. Geophysical coverage was not continuous across the grid for all applied methods. This has previously been considered problematic owing to the lensoidal nature of mineralization and the regional cover masking favorable stratigraphy. Locations of IP anomalism were not adequately explored during the subsequent drilling program (Ministry of Petroleum and Mineral Resources 1992).

### 2.3.8 Surface Geochemistry

Between 1978 and 1980, extensive reconnaissance wadi-sediment sampling took place throughout the Kutam–Al Halahilah district, covering an area of ~1700 km<sup>2</sup>. Identified anomalies were then validated via re-analysis and sampling, local high-density wadi-sediment sampling, and field observations. The latter of these involved the identification of mineralization and gossans along with spot rock-chip and gossan sampling. Values for Cu, Pb, Zn, Co, Fe, Mn, Au, and Ag were reported by Riofinex in their RF-OF-02-22 report.

Assay results (typically Cu, Pb, Zn, As, Au, and Ag) are available for 107 samples at Al Halahilah and Al Halahilah NE (Au) occurrence (MODS 4902); however, data are not available for the other 309 samples. Rock-chip sampling returned up to 7.8% Cu, 7.2% Pb, 31.5% Zn, 22.5 g/t Au, and 175 g/t Ag. For the samples with available assay data, 30 were obtained from channel sampling at the Au prospect, and the other 77 were distributed throughout the broader area.

The sampling resulted in some elevated values for precious and base metals away from the drilled prospects, largely along the western contact of Al Halahilah dome, as identified and mapped by USGS.



### 2.3.9 Drilling

Following reconnaissance wadi-sediment sampling and a magnetic geophysical survey, seven holes totaling 785 m were drilled in Al Halahilah by Riofinex in 1980–1981 (Table 6; Figure 10 Riofinex 1979, Parker 1982). These were drilled to test the subsurface extent of the gossans and took place prior to IP/SP surveys. Drilling was widely spaced at 100 m, and the average hole depth was 120 m. The most significant intercept from Al Halahilah drill program was 0.79% Cu, 0.11% Pb, 7.76% Zn, 1.88 g/t Au, and 64.64 g/t Ag over 2.52 m in drillhole AH4 (Table 7; Figure 11). Parker (1982) calculated a drill-indicated resource of 1.04 Mt, grading 0.44% Cu, 2.99% Zn, 0.45 g/t Au, and 25.2 g/t Ag. The average depth of mineralization intersections is 65 m below an arbitrary datum level at grid zero, and mineralization width appears to increase with depth.

As detailed in Parker (1982), the seven diamond drillholes at Al Halahilah intersected at least four distinct variations of sulfide mineralization and can be correlated with different gossan types:

1. Banded to massive sulfide with notable precious- and base-metal contents. Dominantly pyrite with sphalerite, chalcopyrite, and galena;
2. Replacement-style mineralization in dolomite. Veins and disseminations of sulfide minerals with locally significant precious- and base-metal contents. Dominantly pyrite with sphalerite, chalcopyrite, galena, and tennantite;
3. Disseminated to stringer-type sulfide mineralization in dacitic metavolcanic rocks. Low precious- and base-metal contents. Dominantly pyrite with minor chalcopyrite; and
4. Massive pyrite mineralization associated with quartz veins. No metal contents of interest.

Subsequent study of polished drill core sections revealed the presence of trace amounts of tellurides (altaite and hessite), as well as pyrrhotite and molybdenite. The secondary mineral assemblage comprises goethite, chalcocite, bornite, hematite, digenite, and covellite. The gangue is dominated by carbonate minerals, quartz, and mica (Parker 1982). Atomic absorption spectrometry for Cu, Pb, Zn, Co, Fe, Mn, Au, Ag, and cadmium (Cd) has also been conducted, but the results (RF-BD-01-30) are not readily accessible. Samples were also analyzed by x-ray fluorescence for tin (Sn), barium (Ba), antimony (Sb), and As, where Sb and As pathfinder elements were anomalous. Values of Ba increased upward, which is a common trend in volcanic rock-hosted deposits.

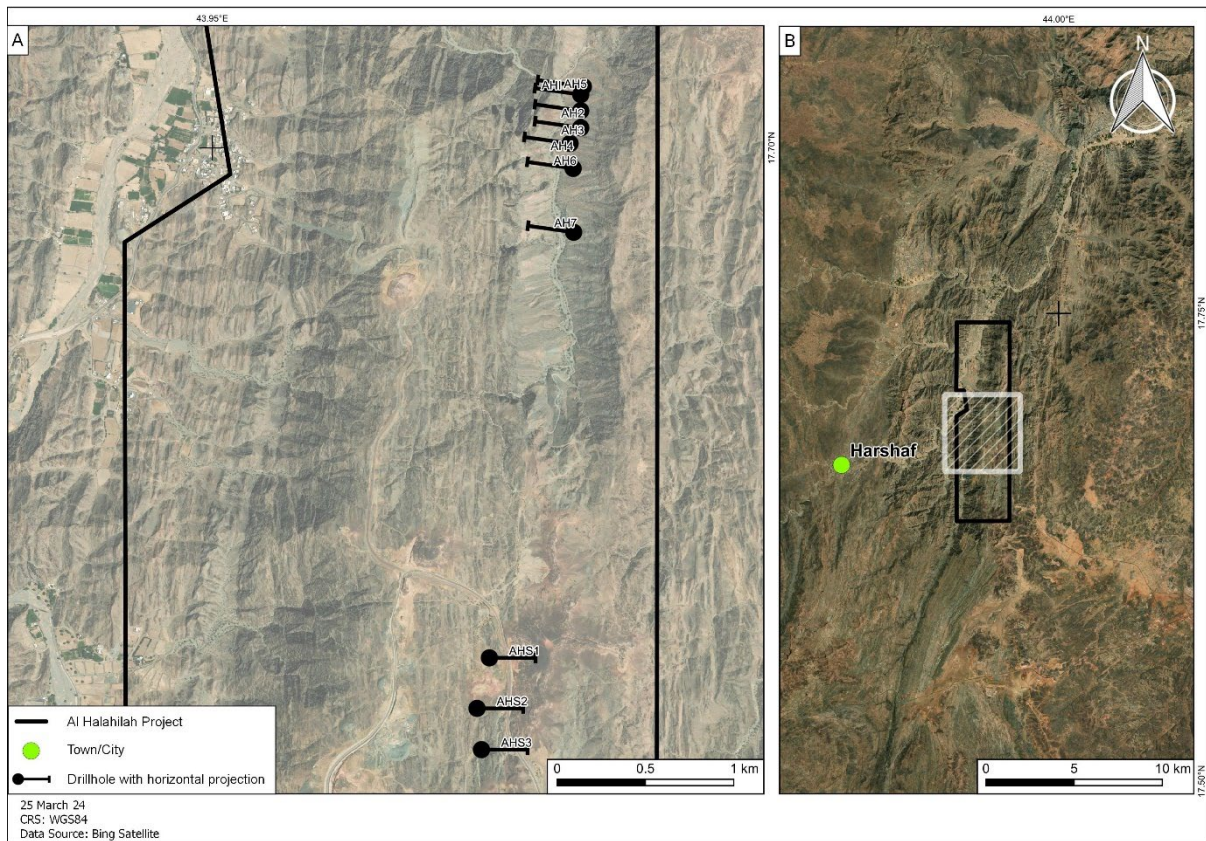
In Al Halahilah South, three widely spaced (200 m) diamond holes totaling 386 m were drilled (Table 6; Figure 10 Riofinex 1979, Parker 1982). The most notable mineralized intercept was 2.1 m, grading 0.18% Cu, 1.12% Zn, and 0.4 g/t Ag. Results indicate only subeconomic grades of precious- and base-metal mineralization, with no indication of increasing widths or grades with depth. Intersections give results that are broadly consistent with the surface.

**Table 7: Drill collar locations and survey data**

Hole	Prospect	mE Local	mN Local	WGS84E	WGS84N	Azimuth	Dip
AH1	Al Halahilah	10	-43	43.96864	17.702979	278	-45
AH2	Al Halahilah	10	-139	43.96864	17.702115	278	-45
AH3	Al Halahilah	10	-240	43.96864	17.701206	278	-45

AH4	Al Halahilah	-50	-333	43.968073	17.700369	278	-60
AH5	Al Halahilah	25	5	43.968782	17.703411	278	-45
AH6	Al Halahilah	-33	-481	43.968234	17.699037	278	-40
AH7	Al Halahilah	-30	-860	43.968262	17.695626	278	-45
AHS1	Al Halahilah South	-285	-3400	43.965851	17.672766	90	-45
AHS2	Al Halahilah South	-355	-3700	43.96519	17.670066	90	-55
AHS3	Al Halahilah South	-330	-3945	43.965426	17.667861	90	-55

Source: Drill collar locations have been georeferenced from local grid mapping in Riofinex Limited, open file report RF-02-2N. As such, latitude and longitude values should be taken as approximate only.



**Figure 10: (A) Drillhole locations (approximate) at Al Halahilah and Al Halahilah South. (B) Al Halahilah Project showing area covered in A.**

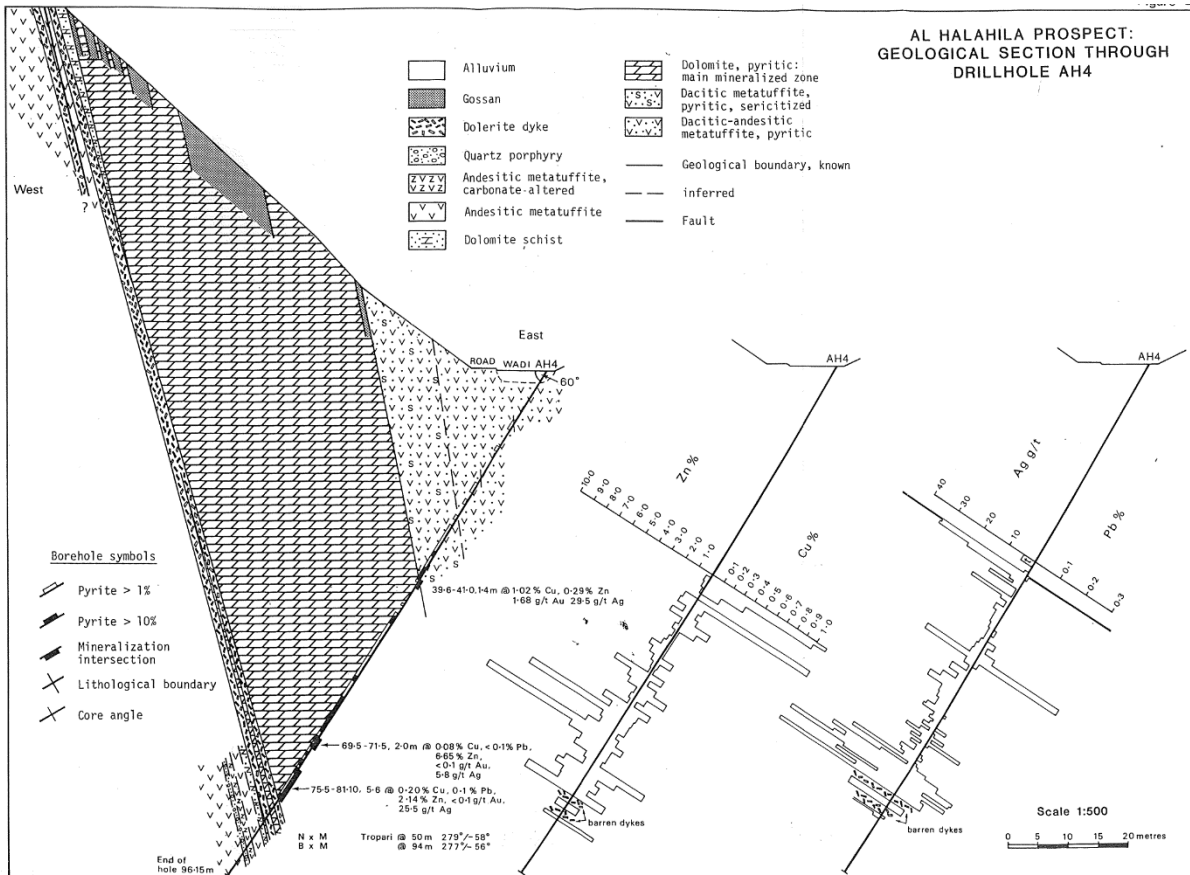


Figure 11: Cross section (looking north) through drillhole AH4. Source: RF-OF-02-22.

**Table 8: Drillhole intercepts at Al Halahilah and Al Halahilah South**

Hole	From (m)	To (m)	Length (m)	Cu (%)	Pb (%)	Zn (%)	Au (g/t)	Ag (g/t)	Geology
AHI	65.75	67.33	1.58	0.44	0.08	2.56	-0.1	25.4	Andesite, dolomite schist
AH2	76	78.6	2.6	0.2	0.01	1.17	-99	13.5	Massive sulfide, base of dolomite schist
A143	90.5	92	1.5	0.24	0.08	1.5	-0.1	6.36	Gossan—appears discordant
AH4	39.6	41	1.4	1.02	ND	0.29	1.68	29.5	Pyritic dolomite
AH4	69.5	71.5	2	0.08	0.10	6.65	-0.1	5.8	Pyritic dolomite
AH4	75.5	81.1	5.6	0.2	0.1	2.14	-0.1	25.5	Pyritic dolomite
AH5	82	83.1	1.1	0.47	ND	0.02	-99	4.1	Pyrite-sericite quartz schist, dolomite schist
AH6	124.48	134.3	9.82	0.59	0.05	3.85	0.6	29.9	Dolomite
AH7	145.75	146.1	0.35	0.36	0.01	1.51	0.2	35.3	Dolomite/Andesite
AHSI	36	38.1	2.1	0.18	ND	1.12	ND	0.4	Quartz-chlorite schist
AHSI	41.4	41.5	0.1	8.2	0.35	1.8	ND	7.6	Manganiferous wad
AHSI	44.95	45.45	0.5	0.69	0.02	0.3	ND	28	Gossan
AHSI	57.8	58.8	1	0.02	0.01	1.8	ND	2.6	Hematite-quartz schist
AHSI	34.5	64.45	29.95	BLD	ND	0.35	ND	ND	0.1% Zn cutoff
AHSI	36.35	48.65	12.3	0.34	ND	ND	ND	ND	0.1% Cu cutoff
AHS2	98.55	104.05	5.5	0.02	0.01	0.06	ND	2	Sericite-quartz schist
AHS2	104.55	109.7	5.15	0.27	0.02	0.31	ND	1.9	Sericite-quartz schist
AHS3	55.45	55.7	0.25	ND	ND	0.03	ND	7	Calcite-chlorite-quartz schist
AHS3	61	62.55	1.55	0.08	0.14	0.98	ND	11.7	Calcite-chlorite-quartz schist

Source: Riofinex Limited. Open file report RF-OF-02-2

### 3. Data Room Overview

Technical and other data is hosted in the Data Room and can be accessed through the Ministry’s website (<https://mim.gov.sa/en/initiatives/31907/>) or any other link provided by the Ministry.

#### TECHNICAL INFORMATION

The technical information folder in the Data Room includes the files described in the table below and will remain open to bidders until the award of the Exploration License.

**Table 9: File Overview**

Key Reports	Entity	Location	Activities
USGS-OR-96-1	USGS 1995 AD 1416 AH	Regional	Report on the USGS Mission to the Kingdom. Reiterates previous work and conclusions. No new information for the Project area.
RF-OF-02-22 RFO-1979-2	Riofinex 1978-1981 AD 1398-1401 AH	Regional	Reconnaissance activities, covering areas identified from a review of previous geological data. 1:50,000 geological mapping. 6,477 regional wadi samples over an area of 1,700 km <sup>2</sup> . Prospects identified were gridded, mapped at 1:1000, and geochemically sampled. Areas of interest were subsequently drilled and targeted for geophysical surveys (SP, IP, magnetic).
RE-OF-02-22 RFO-1979-2 DPI-OF-04-1	Riofinex 1978-1981 AD 1398-1401 AH	Al Halahilah	Ancient workings rediscovered. Gridded an area of ~7,000 m (NS) x 400 m (EW) in Al Halahilah and Halahilah South. Mapped at 1:1000 scale from 850S to 300N; extent of geochemical sampling unknown. No geographic collar coordinates for drilling in the reports; however, a reasonable estimate of position has been given. Magnetics—50 m line spacing, 25 m station spacing. Diamond drilling (seven holes for a total of 785 m) over a strike length of 750 m. Drillhole data used to estimate a resource of 1.04 Mt @ 0.44% Cu, 2.99% Zn, 0.45 g/t Au, and 25.2g/t Ag. VMS-style mineralization with intersections up to 9.8 m, averaging ~2.9 m of mineralization over all drillholes. SP—50 m spaced EW lines between 000N and 500S, 10 m station spacing (carried out after drilling).

Key Reports	Entity	Location	Activities
			IP— Line 200S, 20 m dipole, identified a chargeability anomaly of 64mV/V.
RE-OF-02-22 RFO-1979-2 DPI-OF-04-1	Riofinex 1978-1981 AD 1398-1401 AH	Al Halahilah South	<p>Similar work program as for Al Halahilah and same grid.</p> <p>Ground magnetic survey from 2400S to 6200S on 200 m line spacing with 50 m station intervals, followed by infill surveying with 100 m x 10 m data spacing.</p> <p>SP—100 m line spacing, 10 m station spacing. A persistent 100 mV negative anomaly was identified on lines 3400S to 4000S, coincident with the locations of massive sulfides.</p> <p>IP—seven grid lines, 3400S to 4000S, high-chargeability, low-resistivity anomaly associated with massive sulfides.</p> <p>Three diamond drillholes for a total of 387 m at 200 m spacing. Narrow intercepts of weak to moderate grade base metals.</p>
RE-OF-05-5	Riofinex 1983-1984 AD 1403-1404 AH	Al Halahilah (independent report by D. M. Ransom), regional and prospect reassessment	<p>Independent review of the available data and work at Al Halahilah, including recommendations that have not yet been implemented.</p> <p>Interpretation that mineralized shoots plunge south at 40°-50°.</p> <p>Includes petrological report by Pontifex. Revisited earlier regional work (outside of the area of interest), and some re-assaying carried out using lower Limit of Detection (LOD) methods.</p>
Various 1:100k Sheets, including USGS-OF-02-1, USGS-OF-01-4	USGS 1973-1981 AD 1393-401 AH	Regional	Regional mapping and compilation of 1:100,000 map sheets, which were later compiled into 1:250,000 sheets.
USGS-TR-IO-I	USGS 1988-1989 AD 1409-1410 AH	Regional, focusing on the Halahilah Mineral Belt	Regional geochemistry, including rocks, and a reassessment of the prospectivity of Al Halahilah deposits and region. Included at least 416 samples, with assay results recorded from 77 samples from Al Halahilah and 30 from Al Halahilah NE Au prospect (MODS 4902). Assays not available for the other 309 samples.

Key Reports	Entity	Location	Activities
BRGM-OF-04-11 BRGM-TR-05 39	BRGM 1980-1985 1401-1406 AH	AD Regional	Geophysical map interpretations and compilations, regional VMS metallogeny.

## APPLICATION FORM

The Data Room includes the Application Form that must be completed by bidders as part of their Proposal. The Application Form includes the below sections as referenced in this Information Memorandum.

Section	Description
Section A	Proposal Cover Letter
Section B	Minimum Qualification Criteria
Section C	Technical Requirements
Section D	Resource Exploration and Discovery Activities
Section E	Innovation
Section F	Social Impact Management Plan
Section G	Environmental Impact Management Plan
Section H	Financial Information Requirements
Section I	Corporate and Legal Requirements
Appendix 1	Model Exploration License
Appendix 2	Form of Statement of Confirmation (to be used for Consortium submissions only)

## **PART B: PROPOSAL SUBMISSION RULES**



## 4. Minimum Qualification Criteria

Bidders must demonstrate that they meet the below minimum technical and financial criteria ("**Minimum Qualification Criteria**") in order for the Ministry to continue evaluating their respective Proposals. Bidders must provide responses relating to the Minimum Qualification Criteria in accordance with the form set out in Section B of the Application Form.

The below Minimum Qualification Criteria will be evaluated on a "Pass/Fail" basis. Bidders who do not pass **all** the Minimum Qualification Criteria or do not provide the supporting documents required by the Ministry in relation to any or all of such criteria will be disqualified from the Licensing Round and their Proposal will not be evaluated any further.

**As such, bidders are encouraged to consider the Minimum Qualification Criteria and exercise their own judgment in ensuring that they meet such criteria and are able to provide the supporting documents before they proceed with preparing their Proposal for the Project. The Ministry is not liable to any bidder who submits a Proposal and following evaluation by the Ministry, such bidder is deemed unqualified for the Project for any reason including not satisfying the Minimum Qualification Criteria and is therefore disqualified from the Licensing Round.**

For the avoidance of doubt, where the bidder is a Consortium (as defined in Section 5.13), the technical and financial criteria may be satisfied by separate (and not all) Consortium members. The identity of the relevant Consortium member satisfying the relevant requirement must be indicated clearly in the relevant section and response.

### PART A: TECHNICAL CAPABILITY

#### 1. Internal Capability

Bidders must demonstrate internal capabilities in mineral exploration, and are encouraged to demonstrate the following experience in relation to their personnel:

- access to and ability to appoint, as required, sufficient qualified and experienced geoscientists to carry out the exploration work program as agreed with the Ministry to be undertaken by the bidder, if successful, following the award of the Exploration License, the requirements for which are set out in Section C of the Application Form ("**Work Program**").
- base metals and/ or precious metals experience; and
- ability to develop (or manage the development of) assets through pre-feasibility and feasibility studies.

*Bidders must provide CVs of proposed staff for the Projects (including the exploration manager) and are encouraged to demonstrate the following experience in relation to its personnel:*

- *access to and ability to appoint, as required, sufficient qualified and experienced geoscientists to carry out the Work Program;*
- *base metals experience; and*

- *ability to develop (or manage the development of) assets through pre-feasibility and feasibility studies to construction and operation.*

## **2. Track Record / Examples**

Bidders must demonstrate the following in relation to their past relevant experience:

- a track record of at least one greenfield site and/or two brownfield sites;
- experience in volcanogenic massive sulphide (VMS) or similar style mineralisation;
- capability in base metal/ precious metal projects through the development cycle, from discovery to preliminary economic assessment, via feasibility studies; and
- capability in developing exploration projects beyond the discovery stage.

*Bidders must include the following in relation to each project:*

- *details of minerals being explored;*
- *any significant reliance upon third-party sub-contractors;*
- *details of any geophysical surveying conducted;*
- *details of any relevant technologies used; and*
- *details of any geological activity including mapping and drilling (diamond drilling and reverse drilling).*

## **PART B: FINANCIAL CAPACITY**

### **3. Exploration Expenditure**

Bidders must have undertaken a minimum expenditure of USD five hundred thousand (\$500,000) in exploration activities in the last twelve (12) months, and be able to provide suitable evidence of this.

### **4. Exploration Funding**

Bidders must demonstrate access to at least USD five hundred thousand (\$500,000) to fund the first three months of the Work Program to be undertaken in the Kingdom in connection with the Project.

## 5. Licensing Round Process and Proposal Requirements

### 5.1 Overview of Licensing Round

After the announcement of made by the Ministry in January 2024 in relation to the launch of the next series of the exploration licensing rounds, prospective bidders were invited to submit a nonbinding expressions of interest confirming their interest in participating in licensing rounds launched by the Ministry in the year 2024. Prospective bidders are now invited to participate in the subsequent stage of Al Halahilah Licensing Round by submitting a Proposal in response to this Information Memorandum.

**Bidders are hereby invited to submit their best offer for the Exploration License as part of a valid and binding Proposal.**

It should be noted that all bidders must satisfy the Minimum Qualification Criteria set out in Section 4 of this Information Memorandum in order for the remainder of their Proposal to be considered and evaluated by the Ministry.

Bidders who do not satisfy all the Minimum Qualification Criteria or do not provide the supporting documents required by the Ministry will be disqualified from the Licensing Round and their Proposal will not be evaluated any further.

As such, bidders are encouraged to consider the Minimum Qualification Criteria and exercise their own judgment in ensuring that they meet such criteria and are able to provide the supporting documents before they proceed with preparing their Proposal for the Project. The Ministry is not liable to any bidder who submits a proposal and following evaluation by the Ministry, such bidder is deemed unqualified for the Project and will therefore disqualify from the Licensing Round.

The Proposal stage will identify a single Successful Bidder. The Ministry may then proceed to final discussions with the Successful Bidder, with an expectation that an Exploration License will be awarded to that bidder as quickly as possible.

### 5.2 Proposals

Bidders participating in the Licensing Round should submit a complete Proposal by the Proposal Submission Deadline. **The Proposal must be prepared using the Application Form included in the Data Room.**

Proposals will be assessed and scored based on a number of criteria, including technical and commercial terms and environmental and social impact management plans, including commitment to local communities development.

The bidder whose Proposal receives the highest score following evaluation will be declared as the Successful Bidder for the Site and will be awarded the Exploration License by the Ministry once the legal and regulatory requirements are satisfied.

If the Ministry selects a single Successful Bidder, they will proceed directly to the final stage of the Licensing Round. In this case, the relevant Successful Bidder will be invited by the Ministry to proceed straight to conclusion of the final terms of its Proposal. The second highest scoring bidder in such circumstances shall be the "**Reserve Bidder**".

### 5.3 Model Exploration License

Bidders will be required to confirm in as part of the Proposal Cover Letter (Section 1 of the Application Form) that they accept the terms and conditions of the model exploration license in the form set out as Appendix 1 of the Application Form ("**Model Exploration License**").

Bidders are advised that the terms of the Model Exploration License are non-negotiable, and this should be taken into account in the course of preparing their submissions.

### 5.4 Performance Financial Guarantee

Bidders will be required to confirm in the Application Form and particularly in the Proposal Cover Letter (Section 1 of the Application Form) that, if they are announced as the Successful Bidder, they will provide a performance financial guarantee in favor of the Ministry to guarantee the Successful Bidder's due and punctual performance of the Work Program submitted as part of its Proposal ("**Performance Financial Guarantee**").

The Successful Bidder must submit a Performance Financial Guarantee within the timeline specified by the Ministry (not to be less than 30 days) from when it is announced as the Successful Bidder. The Performance Financial Guarantee must be for an amount equal to at least fifteen per cent. (15%) of the Successful Bidder's projected expenditure throughout the Work Program.

The Performance Financial Guarantee should take the form of an irrevocable on demand bank guarantee, in accordance with the forms approved by the Saudi Central Bank.

The Performance Financial Guarantee shall be provided by a bank licensed to operate in the Kingdom and made in favour of the Ministry and with a validity period of not less than thirty (30) months from the Exploration License issuance date, renewable automatically on a rolling basis for one (1) year periods throughout the term of the Exploration License.

The Performance Financial Guarantee may be called upon by the Ministry at any time during the term of the Exploration License in the event that the relevant Licensee fails to meet the agreed performance requirements and targets as set out in the Work Program.

### 5.5 Social Impact Management Plan

Bidders must submit a social impact management plan ("**Social Impact Management Plan**"), identifying proposed contributions to the local community, and how the applicant will address the communities' needs and mitigate any negative impacts. The form of the Social Impact Management Plan to be submitted by bidders is set out in Section G of the Application Form.

## 5.6 Environmental Impact Management Plan

Bidders must submit an environmental impact management plan ("**Environmental Impact Management Plan**") in accordance with the form set out in Section H of the Application Form.

## 5.7 Proposals Evaluation

The Proposal stage evaluates both the technical and financial aspects of each submission. This analysis will look at the bidder's capabilities, as well as its plans and proposed investments with regards to the exploration and possible development of the Site including community engagement and employment and training opportunities for the Local Communities.

It should be noted that pursuant to the Implementation Regulations, Local Communities for the purposes of preparing Proposals means natural persons who permanently reside in communities within one hundred (100) kilometers from the Site. Please refer to the Mining Investment Law and its Implementing Regulations for the further clarify on the definition of Local Communities.

**When submitting any Proposal, bidders are to always adhere to the Proposal Submission Rules and this Information Memorandum. Proposals that are not compliant with the requirements to this Information Memorandum, or are incomplete, may be rejected by the Ministry. All Proposals must be received by the Ministry by the Proposal Submission Deadline.**

**The bidder whose Proposal receives the highest score will be announced as the Successful Bidder for the Site and will be awarded the Exploration License by the Ministry once the legal and regulatory requirements are satisfied.**

## 5.8 Scoring Methodology

Each Proposal shall be assessed by the evaluation Committee in accordance with the scoring method set out in the following table.

**Table 10: Scoring Criteria Weighting**

Section	Criteria	Weighting
Proposed Work Program and Exploration Spend	Proposals will be evaluated on the thoroughness and soundness of the bidder's proposed Work Program for the entire area and the knowledge and understanding of the regional and license area geology, including stage planning, contingency planning and whether the bidder has the ability to attain the objectives in a timely manner. Bidders must address the requirements set out in Part 1.1 of Section C of the Application Form.	50%
Resource Exploration and Discovery Activities	Proposals will be evaluated on the bidder's experience in relation to focused exploration activities, based on its responses to the information required in Section D of the Application Form.	20%

Section	Criteria	Weighting
Innovation	Proposals will be evaluated based on the innovative solutions and technologies used by the bidder in mineral exploration activities and discovery of mineral potential in base metals, based on the responses provided by bidders to the information required in Section E of the Application Form.	10%
Financial Capability	Proposals will be evaluated on the bidder's financial resources, and its capability to fund its Work Program and other proposed expenditure, in accordance with the form and requirements set out in Section F of the Application Form. Each bidder should provide an outline of its potential financing plan for the first two license years to support such funding requirements.	Pass/ Fail
Social Impact Management Plan	Proposals will be evaluated on the basis of whether the bidder has the demonstrated ability to successfully implement social development in and around the Site, as well as their proposed local community expenditure based on its responses to the information required in Section G of the Application Form.	20%
Environmental Impact Management Plan	Proposals will be evaluated on the basis of whether the bidder has the demonstrated ability to ensure the protection of the environment based on its responses to the information received in the form set out in Section H of the Application Form.	Pass/ Fail
Corporate and Legal Requirements	Proposals will be evaluated on the basis of the bidder's corporate and legal information regarding the structure, activities and litigation history of the bidder and its group, as set out in Section I of the Application Form.	Pass/ Fail
Performance Financial Guarantee	Proposal will be evaluated on the bidder's commitment to provide a Performance Financial Guarantee if selected as a Successful Bidder.	Pass/ Fail
Model Exploration License	Proposals will be evaluated on the bidder's commitment to accept the terms of the Model Exploration License.	Pass/ Fail

## 5.9 Final Satisfaction of Legal and Regulatory Requirements Stage

The announcement of the Successful Bidder will be made promptly after the Evaluation Committee<sup>1</sup> has concluded its evaluation of the Proposals. Following the announcement, the Ministry will invite the Successful Bidder into final discussions and conclusions on the details of any proposed Work Program,

<sup>1</sup> The evaluation committee appointed by the Ministry to assess the Proposals, comprising of experts in mining, environmental, legal, and commercial matters

Environmental Impact Management Plan or Social Impact Management Plan, to the extent that the Ministry believes any such discussions are required.

### **5.10 Award of Exploration License**

Once a Successful Bidder is selected, the Ministry may seek to clarify with the Successful Bidder certain final points on the Successful Bidder's Work Program, the Environmental Impact Management Plan and the Social Impact Management Plan.

If discussions are concluded successfully, and subject to the satisfaction of all legal and regulatory requirements (including issuance and delivery of the Performance Financial Guarantee) the Ministry shall award the Exploration License to that Successful Bidder.

In the event that the final discussions referred to above are not successfully concluded with the Successful Bidder, the Ministry shall have the right to approach the Reserve Bidder to enter into such discussions.

If, subject to the satisfaction of all legal and regulatory requirements (including issuance and delivery of the Performance Financial Guarantee) the Reserve Bidder becomes the Successful Bidder, the Ministry shall award the Exploration License to that Successful Bidder.

If no agreement is reached with either the Successful Bidder or the Reserve Bidder, the Ministry reserves the right to approach such other bidders who have submitted a valid and binding Proposal as it sees fit.

### **5.11 Bidders' Information Requests and Clarifications**

Bidders may wish to raise clarifications or request further information concerning this Information Memorandum.

All clarification and information requests concerning this Information Memorandum must be written in Arabic or English and submitted via email to [miningbidding@mim.gov.sa](mailto:miningbidding@mim.gov.sa) no later than 21<sup>st</sup> April 2024 ("**Information Request Deadline**").

Bidders should not contact any person within, or associated with, the Ministry or the Government, or persons associated with their Project advisors, in connection with any requests for additional information or clarifications relating to this Information Memorandum, except via email as set out above.

To the extent possible, such information requests shall receive written responses by email communication as soon as practicable and where the question is of relevance to all bidders, the question and response will be distributed to all bidders may not respond to information requests submitted after the Information Request Deadline. The Ministry may, in its sole and absolute discretion, delete or remove any of the clarifications or request for further information if in the Ministry's view the clarification or request will result in any confusion in respect of the Information Memorandum or contains indications to certain items such as costs and prices.

## 5.12 Bidder Site Visits

In the event a bidder wishes to visit the Site in advance of submitting its Proposal, such bidder may liaise with the Ministry to arrange a site visit by sending a request via [miningbidding@mim.gov.sa](mailto:miningbidding@mim.gov.sa).

## 5.13 Consortium Proposals

Bidders may form a consortium (including as a joint venture, special purpose vehicle with multiple shareholders or other similar arrangements) ("**Consortium**") and the lead consortium member should be identified in the Proposal ("**Lead Consortium Member**"). Responses must enable the Ministry to assess the overall Consortium.

For the avoidance of doubt, the Consortium does not necessarily need to include a KSA national partner or KSA incorporated entities; however, Consortium members should note that, pursuant to Article 17 of the Implementation Regulations, the members of the Consortium that are part of a successful bid for the Project are required to incorporate a legal entity in KSA, with the shareholdings of each member in that legal entity being equal to the members' interests in the Consortium. The Exploration License is then required to be issued to the KSA-incorporated legal entity, within the period prescribed by the Ministry.

Proposals submitted by Consortiums must include the following:

1. Details of the arrangement to establish the consortium (maximum 500 words).
2. Proposed percentage shareholding and governance rights of each member in the Consortium.
3. The elements of the Proposal and the wider Project for which will each Consortium member be responsible.
4. Confirmation statement signed by all proposed members of the consortium (in the form set out as Appendix 2 of the Application Form).

In responding to the Minimum Qualification Criteria on behalf of the Consortium, technical and financial requirements may be satisfied by separate (and not all) Consortium members. The identity of the relevant Consortium member satisfying the relevant requirement must be indicated clearly in the relevant response.



## 6. Other Terms of the Proposal Submission Rules

### 6.1 Documents and Information

This Information Memorandum is and shall remain the property of the Ministry and is provided to the bidders solely for the purpose of preparing and submitting their Proposal.

The provisions of this section shall also apply to Proposals and all other documents submitted by the bidders in relation to their Proposals, and the Ministry will not be under any obligation to return to the bidders any bid, document or any information provided along therewith.

### 6.2 Proposal Submission Rules

Submissions must be received no later than the Proposal Submission Deadline and shall be deemed to be the bidder's binding offer with respect to the award of the Exploration License.

Bidders are required to prepare their Proposals in the English language and submit their Proposal electronically via email to [miningbidding@mim.gov.sa](mailto:miningbidding@mim.gov.sa).

The Ministry will provide written acknowledgement of receipt of each submission, indicating the time and date of such receipt, as soon as is reasonably practicable.

The Ministry may, in its sole discretion, extend the Proposal Submission Deadline, by issuing an amendment to the Proposal Submission Rules that is made available to all bidders.

### 6.3 Costs of Proposal

The bidders shall be responsible for all costs and expenses associated with the preparation of their Proposal and their participation in the Licensing Round. The Ministry will not be responsible or in any way liable for such costs and/or expenses, regardless of the outcome of the Licensing Round.

### 6.4 Verification of information by the Bidders

By submitting a Proposal, each bidder is deemed to have:

- (1) made a complete and careful examination of the Information Memorandum and unconditionally and irrevocably agreed and accepted the terms thereof;
- (2) reviewed all relevant information provided by the Ministry or SGS as may be relevant to the Proposal;
- (3) undertaken their own review of any information provided in the Data Room and which is publicly available, taken any professional advice they deem appropriate and accepted the risks of inadequacy, error or mistake of the information provided in this Information Memorandum or furnished by or on behalf of the Ministry relating to any of the matters related to the Licensing Round;

- (4) satisfied itself on all matters regarding the Licensing Round and the submission of the Proposal, in accordance with this Information Memorandum and the Mining Regime (including in relation to the performance of any obligations);
- (5) acknowledged and agreed that inadequacy, lack of completeness or incorrectness of information provided in this Information Memorandum shall not be a basis for any claim for compensation, damages, extension of time for performance of its obligations and loss of profits from the Ministry, or a ground for termination of the Exploration License by the Successful Bidder; and
- (6) agreed to be bound by and to comply with the terms of the undertakings provided by it.

The Ministry shall not be liable for any omission, mistake or error in respect of any of the information provided or on account of any matter or thing arising out of or concerning or relating to the Information Memorandum or the linked documents, including any error or mistake therein or in any information or data given by the Ministry.

## **6.5 Information Requests, Verification by the Ministry and Disqualification**

The Ministry reserves the right to verify all statements, information and documents submitted by the bidder in response to the Information Memorandum, and to request any further information it requires in order to make an informed assessment of any Proposal. The bidder shall, when so required by the Ministry, make available all such information, evidence and documents as may be reasonably requested by the Ministry. A bidder is encouraged to provide a written response to such request or clarification promptly and in all cases, within five (5) business days. Any such verification or lack of such verification by the Ministry shall not relieve the bidder of its obligations or liabilities hereunder or under the Mining Investment Law and its Implementing Regulations nor will it affect any rights of the Ministry thereunder.

The Ministry reserves the right to reject any Proposal in the event that any of the following occurs:

- a. at any time a misrepresentation is made by the relevant bidder or the Ministry becomes aware of any such misrepresentation;
- b. the bidder does not provide, within the time specified by the Ministry, any supplemental information requested by the Ministry to complete its evaluation of the Proposal; or
- c. any act or omission of the bidder which results in violation of or non-compliance with this Information Memorandum, or any other document referred to therein or issued pursuant thereto or the Mining Regime and any other applicable laws relevant for the award process.

Any rejection of a Proposal under the above terms may lead to a disqualification of the bidder for bidding in any stage of the Licensing Round or any other Licensing Round(s) conducted by the Ministry for a period of five (5) years commencing from the submission date of the Proposal or any other earlier date specified by the Ministry.

## **6.6 Non-Compliant Proposals**

Notwithstanding Section 6.5, bidders may submit non-compliant Proposals which depart from the terms set out in this Information Memorandum, including without limitation, the various requirements set out in Section 5. However bidders are advised that in evaluating Proposals, preference will be given to compliant Proposals and any non-compliant Proposals will only be considered when there is demonstrable and substantial commercial or technical benefit to the Kingdom, such assessment to be made solely at the Ministry's discretion.

## **6.7 Amendments to this Information Memorandum**

At any time prior to the Proposal Submission Deadline, the Ministry may, for any reason, whether on its own initiative or in response to clarifications requested by a bidder, amend this Information Memorandum.

Any amendment to this Information Memorandum shall be made in writing and shall be made available to all bidders. Any such amendment shall be deemed as an integral part of this Information Memorandum.

In order to provide the bidders reasonable time to take into account any such amendment, or for any other reason, the Ministry may, in its sole discretion, extend the Proposal Submission Deadline.

## **6.8 Modifications/Substitutions/Withdrawal of Proposals**

A bidder may modify, substitute or withdraw its Proposal after submission, but prior to the Proposal Submission Deadline.

No Proposal shall be modified, substituted or withdrawn by the bidder on or after the Proposal Submission Deadline, unless the modification, substitution or withdrawal has been expressly requested by the Ministry.

## **6.9 Rejection of Proposals**

Notwithstanding anything contained in this Information Memorandum, the Ministry reserves the right to reject any Proposal and/ or to annul or elect not to proceed with the Licensing Round and reject all Proposals at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons therefor.

Without prejudice to the generality of the foregoing, the Ministry reserves the right to reject any Proposal based on any conditions specified in this Information Memorandum, including without limitation, the following:

- a. the relevant Proposal has not been submitted with all the information and details listed as being required in this Information Memorandum; or
- b. the relevant Proposal is non-compliant with the terms of this Information Memorandum.

## 6.10 Validity of the Proposals

A Proposal must be and remain valid for a period of one hundred and eighty (180) days from the Proposal Submission Deadline.

If the Successful Bidder is not announced within of one hundred and eight (180) days from the Proposal Submission Deadline, the Licensing Round shall be annulled.

## 6.11 Changes affecting Bidders

Upon submission of the Proposal, any changes of information which have been submitted by the bidder must be immediately communicated to the Ministry.

## 6.12 Fraud and Corrupt Practices

Bidders and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Licensing Round and subsequent to the grant of the Exploration License. Notwithstanding anything to the contrary contained herein, the Ministry may elect to reject a Proposal and/or revoke the Exploration License, without being liable in any manner whatsoever to the bidder, Reserve Bidder, or the Successful Bidder, as the case may be (each a "**Relevant Bidder**"), if the Ministry determines that the Relevant Bidder has, directly or indirectly or through an agent, engaged in Corrupt Practices, Fraudulent Practice, Coercive Practice, Undesirable Practice or Restrictive Practice as part of the Licensing Round.

Without prejudice to the rights of the Ministry hereinabove and the rights and remedies which the Ministry may have under the Exploration License, or otherwise if a Relevant Bidder is found by the Ministry to have directly or indirectly or through an agent, engaged or indulged in any Corrupt Practices, Fraudulent Practices, Coercive Practices, Undesirable Practices or Restrictive Practices during the award process, or after the grant of the Exploration License, such Relevant Bidder shall not be eligible to participate in any Licensing Round undertaken by the Ministry for a period of five (5) years from the date the Ministry becomes aware of the same.

For the purposes of this Information Memorandum, the following terms shall have the meaning hereinafter respectively assigned to them:

### **Corrupt Practice**

means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the Licensing Round (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of the Ministry who is or has been associated in any manner, directly or indirectly, with the Licensing Round, or at any time prior to the expiry of 1 (one) year from the date such official resigns or retires from or otherwise ceases to be in the service of the Ministry, shall be deemed to constitute influencing the actions of a person connected with the award process);

<b>Fraudulent Practices</b>	means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the award process;
<b>Coercive Practices</b>	means impairing or harming, or threatening to impair or harm, directly or indirectly, any person or property to influence any person's participation or action in the award process;
<b>Undesirable Practice</b>	means <ul style="list-style-type: none"><li>i. establishing contact with any person connected with or employed or engaged by the Ministry with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the award process; or</li><li>ii. violating of the Mining Regime or any other applicable laws; and</li></ul>
<b>Restrictive Practice</b>	means forming a cartel or arriving at any understanding or arrangement among other bidders with the objective of restricting or manipulating a full and fair competition in the award process.

## 6.13 Correspondence

Unless otherwise provided in this Information Memorandum, all communications and correspondence from bidders to the Ministry in connection with the Licensing Round prior to the award of the Exploration License must be in English and submitted via email to [miningbidding@mim.gov.sa](mailto:miningbidding@mim.gov.sa).

For the avoidance of doubt, clarifications relating to the Information Memorandum should be sent by bidders to the Ministry in accordance with Section 5.11.

## 6.14 Governing law

The Licensing Round shall be governed by, and construed in accordance with, the laws of the Kingdom.

## 6.15 Rights of the Ministry

The Ministry, in its sole discretion and without incurring any obligation or liability, reserves the right, at any time, to:

- a. suspend and/ or cancel the Licensing Round and/or amend and/or supplement the award process or modify the dates or other terms and conditions relating thereto;
- b. consult with any bidder as it may deem fit in connection with the Licensing Round;
- c. seek clarification of any Proposal, to interview, or to hold discussions with any bidder at any time after the Proposal Submission Deadline;

- d. retain any information and/ or evidence submitted to the Ministry by, on behalf of, and/ or in relation to any bidder; and/or
- e. independently verify, disqualify, reject and/ or accept any and all submissions or other information and/ or evidence submitted by or on behalf of any bidder.
- f. establish the rules and procedures governing the bid preparation, submission, evaluation, and selection processes;
- g. cancel or modify the terms and conditions of Proposal Submission Rules and/or cancel the evaluation process at any stage;
- h. select the Successful Bidder and Reserve Bidder;
- i. appoint an Evaluation Committee;
- j. use the Transaction Advisory Team and/or any third-party consultants to assist with any aspect of the Proposal submission, evaluation, selection, and/or negotiation processes; or
- k. waive any deficiency, irregularity, or omission in any Proposal provided that such waiver does not materially affect the substance or validity of the tender process as outlined in this Information Memorandum.

By submitting a Proposal, a bidder agrees to release the Ministry, its employees, agents and advisers, irrevocably, unconditionally, fully and finally from any and all liability for claims, losses, damages, costs, expenses or liabilities in any way related to or arising from the exercise of any rights and/ or performance of any obligations hereunder, pursuant hereto and/ or in connection with the Licensing Round and waive, to the fullest extent permitted by applicable law, any and all rights and/or claims it may have in this respect, whether actual or contingent, whether present or in future.

## **6.16 Bidder Acknowledgements**

In addition to the acknowledgments set out in Section 6.4, by submitting a Proposal, each bidder acknowledges the following:

- a. neither the Ministry nor its representatives makes any express or implied representation or warranty as to the completeness, accuracy, currency, reliability or suitability of this Information Memorandum and none of such persons will have any liability to the bidder or its representatives relating to or arising from their use of any information or for any errors therein or omissions therefrom nor will they be obliged to update or correct any inaccuracy in the information or otherwise provide additional information;
- b. reliance upon or use of the information contained in this Information Memorandum is at the sole risk of the bidder and its representatives;
- c. the Ministry will not be under any legal obligation or have any liability to the bidder of any nature whatsoever by virtue of the instructions in this Information Memorandum;

- d. the Ministry will not be deemed to have accepted any offer, and no contract or agreement with respect to the Site would be deemed to be entered between the Ministry and any bidder, unless and until the Exploration License has been executed by the Ministry and awarded to the Successful Bidder; and
- e. the Ministry has the right at any time and in its absolute discretion to terminate, change or delay the award process and terms and the Ministry will not be obliged to accept any or the highest or best offer and may, at any time and in its absolute discretion, request that the bidder return or destroy any document or information provided to it in connection with this Information Memorandum.

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